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Understanding physical and psychosocial workplace characteristics affecting fruit & vegetable intake: A study of white-collar employees in Germany's manufacturing industry

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This dissertation is dedicated to my wonderful wife Friederike

For her endless love, support and faith

Abstract

The purpose of this quantitative-based study is to explain the workplace characteristics affecting the fruit and vegetable intake of white-collar employees at work. It explores whether any differences found are related to employee hierarchy position. It puts the implications on organizations in relation to the financial impacts occurring through presenteeism. Presenteeism is a loss in employee productivity, which can be positively impacted through the consumption of fruit and vegetables.

The research focus is to understand the requirements affecting the actual intake of fruit and vegetables. The urgency of the research is given by the high costs of presenteeism in the German manufacturing industry and the need for additional management perspectives.

The research looks at white-collar employees in the German manufacturing industry. These employees show the highest rate of presenteeism. Availability, Accessibility, Workplace Design, Social Climate and Communication are the workplace characteristics considered. In addition, insights in terms of barriers and needs are explored, allowing the consideration of other relevant angles from the perspective of contribution to practice. This allows recommendations for a business to be derived.

The research was carried out using the philosophy of positivism, assuming that existing characteristics in the workplace environment are explored. The data were collected using a questionnaire. The quantitative data were the primary source of information and were collected using a 5-point Likert-style scale and multiple-choice approach. In total, 374 participants completed the quantitative section of the survey. The quantitative data were used to understand the contribution of the pre-selected workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication to explaining the fruit and vegetable intake. Additional qualitative data from open-ended questions were used to identify any other barriers or needs employees may have in the workplace related to the consumption of fruit and vegetables.

The survey found that the Workplace Design and Social Climate are small positive predictors for the consumption of fruit and vegetables of employees with a managerial job role. Accessibility is a weak negative predictor for Administrative Staff. It was found that 11.2% of the variance in the fruit and vegetable consumption of managers and the related workplace characteristics can be

explained with the model of this research. It was further found that 13.9% of the same variance for the Administrative Staff can be explained.

Not all considered and pre-selected workplace characteristics used in this research have an effect on the intake of fruit and vegetables. It is recommended that organisations set priorities on workplace characteristic-based interventions which depend on the employee hierarchy position. Interrelations between workplace characteristics may exist. From the perspective of academic contribution to future research, this thesis found that a difference in the workplace characteristics predicting fruit and vegetable intake is seen when multiple workplace characteristics are considered simultaneously. An increased fruit and vegetable consumption can be expected through an intervention in the Workplace Design and Social Climate, while the increase of the actual consumption might be small. The intervention can be supported by new and additional workplace characteristics such as appropriate Hygienic Conditions and Free F&V Products.

From the perspective of contribution to practice, this thesis supports investments in workplace characteristics positively affecting the fruit and vegetable intake of employees and thereby reducing the rate of presenteeism and its related costs. The expense of identifying relevant workplace characteristics and executing related interventions becomes justifiable. Stand-alone solutions are probably less successful than a multicomponent approach. It is recommended to carefully choose the interventions which meet the requirements of the targeted employee hierarchy group and ensure a positive effect on the actual fruit and vegetable intake.

Keywords: workplace environment, worksite, presenteeism, fruit and vegetables, availability, accessibility, workplace design, manufacturing industry, white-collar employees, social culture, health, hygienic conditions, free fruit and vegetables, social climate

Author's Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Worcester and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other educational institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

Signature

15.12.2020

Date

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Glossary of Key Terms

Accessibility	Right and affordable fruit and vegetable is accessible at right time with right quality and prepared
Availability	Food is present
Barriers	Factors blocking the F&V consumption
Communication	Internal communication between employees and their employer, in terms of exchanging information
G-Manager	Group of Manager, considering Manager, Senior Manager, Executive Manager and Owner, Board Members or similar
Office	Building or buildings of an employer
Presenteeism	Loss of productivity
Social Climate	Work is important to employees, and managers and employees value each other as well as work together in an appropriate way
Workplace	Area in the workspace where employees execute the job, such as office room or desk
Workplace Characteristics	Elements of the workplace environment
Workplace Design	Modern and ergonomically appropriate facilities, interior and style of the workplace
Workplace Environment	All surroundings of employees at work
Workspace	Section of the office where employees work, such as corridor or floor

List of Abbreviations

F&V	Fruit and Vegetable
ILO	International Labour Organization
MOE	Margin of Error
P-P Plot	Probability-Probability Plot
Q-Q Plot	Quantile-Quantile Plot
VIF	Variation Inflation Factor
WHO	World Health Organization

1 Introduction

This introductory chapter presents the research background. It provides necessary information about the management of employees and the workplace environment. The overall research justification is pointed out and the research gap, the research questions and the research area are introduced. The following overview also introduces the main terms and the variables discussed.

1.1 Overview

Workplace characteristics are of high relevance when organisations aim to effect employee behaviour or habit (Chandrasekar, 2011). Increasing the actual intake of fruit and vegetables at work shows a wide range of benefits, including cost reduction potentials for the employer. This research aims to understand which opportunities an employer has to affect the actual fruit and vegetable intake of employees through changes in the workplace characteristics.

The workplace is the area where employees are located, meet with others and execute their daily work (Weil, 2010; Tsai et al., 2015). In this research study, the workplace environment is understood as the surroundings of employees at work. Workplace characteristics are elements of the workplace environment (Secret, 2000; Secret and Sprang, 2001; Burton, 2010; Chandrasekar, 2011; Patterson-Silver Wolf et al., 2013).

The workplace characteristics considered in this research are Availability, Accessibility, Workplace Design, Social Climate and Communication. These independent variables are used statistically to explain the dependent variable F&V Intake. Availability and Accessibility are seen as a minimum requirement of fruit and vegetables in order to encourage a consumption, as an employee is only able to access present fruit and vegetables for consumption (Cullen et al., 2003; DeCosta et al., 2017). It is necessary to consider Workplace Design to verify that physical and ergonomic conditions are appropriate in the office (Burton, 2010; Gilbert et al., 2015). The Social Climate and Communication are used as variables to factor in the inner-organisational attitudes and relations (Burton, 2010; Asada et al., 2017).

In addition to these variables, further demographic-relevant aspects are taken into consideration. Research studies show that in addition to gender, education and age are also associated with the actual fruit and vegetable consumption (Watters, Satia and Galanko, 2007). These variables, as well as the employee hierarchy position in the organisation, are collected during the data

collection process in order to get insights into new or additional workplace characteristics. The employee hierarchy position is also required to explain any differences in the intake of fruit and vegetables.

1.2 Corporate Social Responsibility

The concept of Corporate Social Responsibility describes the accountability of a for-profit organisation towards its environmental, social and financial performance. It means that organisations need to follow more than governmental conditions, such as laws or regulations. It is expected from an organisation to abide by social and environmental norms, while creating economic value. These three elements act as an umbrella and are inherently linked to each other (Voiculescu and Yanacopulos, 2011).

The intention of Corporate Social Responsibility is to give a moral value to decisions made in organisations. Corporate Social Responsibility includes the way in which organisations communicate, work and behave (Yip, Van Staden and Steven, 2011; Jones Christensen, Mackey and Whetten, 2014). The economic responsibility is seen as the financial accountability and the business's self-perception of its scope and its reason for existence. The social and environmental norms refer to doing the right thing (Jain, Leka and Zwetsloot, 2011). The social element of the Corporate Social Responsibility includes the accountability an organisation has towards taking care of its employees (Jain, Leka and Zwetsloot, 2011). Within the social and economic responsibility, the management of labour productivity has received certain attention in the academic literature and the real world (Delmas and Pekovic, 2018). The individual employee productivity is impacted by different factors and requires detailed consideration (Yang, Zhu and Xie, 2016).

Managing employees is a well discussed segment in the literature. The work of Aguinis, Joo and Gottfredson (2013) explores the achievements of monetary rewards and is supported through the work of Delmas and Pekovic (2018), who identified how employee performance can be improved. In their work, Solomon et al. (2012) link employee motivation to the organisational performance to understand the effectiveness of employee motivation management in the manufacturing industry particularly. Another perspective is presented by Tsai et al. (2015). They tested the effect of the organisational support on employee creativity through effects in the work environment. They state that their findings support the point of view that the work environment holds a mediating role towards the work atmosphere. These presented research studies have in

common that employees are key resources requiring management from an organisational perspective because of their impact on the business profitability (Delmas and Pekovic, 2018). This perspective supports the position represented by Porter and Kramer (2007), who state that employees allow an organisation to gain a competitive advantage. This shows the link between the social and the financial responsibility of a for-profit organisation.

Labour management has received a lot of management attention in recent years (Delmas and Pekovic, 2018). Such management includes the workplace environment as an segment of the organisational management (Seppala and Cameron, 2015). The workplace environment is an area which influences the employee morale and productivity (Chandrasekar, 2011). The workplace environment is defined through different workplace characteristics (Belitz, and Eickelpasch, 2015). The workplace characteristics and the related management decisions are seen as an element of the Corporate Social Responsibility for two reasons. Firstly, the organisation has a responsibility to take care of its employees, which includes providing an adequate workplace environment (Jain, Leka and Zwetsloot, 2011; Kolbe-Alexander et al., 2014). Secondly, the organisation needs to manage its costs and its profits in order to ensure its economic existence (Dincer, 2011; Jones Christensen, Mackey and Whetten, 2014).

In the early years of Corporate Social Responsibility, Friedman (2007) stated that the overall organisational responsibility lies in the purpose to increase the profits only. This textbook from 2007 reprints an article from Milton Friedman initially published in the New York Times Magazine in 1970. This underlines the validity of this work in today's times. The financial business performance is an important indicator for managers in their business evaluation responsibility and accountability (Mauboussin, 2012).

Walker (2004) thus explains that business success traditionally means to grow the organisation's financials. A research study (Piper, 2010) explains that a required financial health of a business is the fundament for the future business existence and requires therefore certain management attention. Piper (2010) explains with this statement that Friedman's statement from 1970 in relation to Corporate Social Responsibility seems to be in its fundaments still valid. Similarly to Friedman (2007), it is pointed out in the textbook "The Business of Human Rights" (Voiculescu and Yanacopulos, 2011, p. 2) that "the primary responsibility of a business" is "to produce goods and services in a way that is profitable". An organisation which does not generate profits in the long term will disappear over time and hence all related jobs, ethical activities or other subjects.

The aim to increase profits drives therewith an organisation's management activities. The future existence ensures that organisations can comply with the other Corporate Social Responsibility accountabilities towards the environmental and social norms.

The financial accountability, including a competitive market position and long-term financial health, may therefore often receive the highest attention from executive managers (Holtbrügge, 2004; Hamilton, 2012). Taking care of the financial health and managing costs may be at odds with managing the labour and providing adequate conditions in the workplace environment. The workplace environment requires continuous maintenance and changes. This leads to costs, impacting the financials (Chandrasekar, 2011). With the impact of the workplace environment on the morale and the productivity of employees, it is difficult to justify a return of investment (Watson et al., 2016). To overcome this, it might be necessary to consider a cost element impacting the financial performance of an organisation which is caused by the employees and which is related to the workplace environment.

1.3 Presenteeism

Presenteeism is often understood in the literature as a loss of productivity, because employees are working while they are sick (Chiara Ardito et al., 2012). This means that employees appear at their workplace and are unable to perform as effectively as usual, which is due to current health issues (Aronsson, Gustafsson and Dallner, 2000; Dewa et al., 2004). This is seen as the most traditional and classical understanding of presenteeism (Yang, Zhu and Xie, 2016).

Aronsson and Gustafsson (2005) use this understanding in their work exploring sickness presenteeism. They conclude that factors such as staff replacement, time pressure, insufficient resources or poor personal financial situations are factors impacting the risk of sickness presenteeism. A more currently used definition of presenteeism includes, along with sickness, also other conditions and events reducing employee productivity (Lewis and Cooper, 1995; Hummer, Sherman and Quinn, 2002; Garrow, 2016; Yang, Zhu and Xie, 2016). This includes personal, work-related and social factors (Steinke and Badura, 2011) and the wide range of stress-related factors (Lohmann-Haislah, 2012). Other research studies consider presenteeism in a wider scope as a general employee-caused productivity loss (Burton et al., 2017). Other conditions and events limit or reduce employee productivity and lead to presenteeism (Yang, Zhu and Xie, 2016). A loss in productivity is a reduction in the performance of an employee during the working hours (Strömberg et al., 2017).

The wider perspective of the organisational accountability given through Corporate Social Responsibility demonstrates the need to take multiple elements causing loss in productivity through presenteeism into account. It is therefore seen as appropriate for this study to apply the more recent and wider definition of presenteeism, understood as a loss through reduced employee productivity (Aronsson and Gustafsson, 2005; Burton et al., 2017).

Along with other authors, Steinke and Badura (2011) point out that there is a different understanding of presenteeism existing in Europe and Germany compared to the US. In the US, the costs due to presenteeism receive a higher degree of attention in the debate. In Germany, and in some parts of Europe, the employee behaviour of coming to work during sickness is the area of concern. The US point of view may bear the advantage of making presenteeism financially relevant for organisations in Germany and the EU. The presenteeism debate demonstrates the difficulty of handling the intentions of different research studies and working with presenteeism because of a missing harmonised definition in the literature (Steinke and Badura, 2011). Steinke and Badura (2011) explain in their study that the term presenteeism was introduced for the first time in 1955 by Auren Uris, who aimed to increase the employees presence at work through interventions. Steinke and Badura (2011) explain further that in 1970, Smith reviewed presenteeism initially under a financial cost point of view, which is in line with the US understanding.

A study from the consulting company booz&co. found that presenteeism leads to annual costs of 2,399 euro per employee in Germany (Maar and Fricker, 2011). This cost factor does not take any related costs such as illness representation, loss in know-how, infecting working colleagues or reducing the team cooperation into account. The costs of presenteeism occur primarily because of limited capability to work, reduced quality, increased mistakes, accidents but also chronic disease or burnouts.

Maar and Fricker (2011) state in their work that presenteeism causes about 2/3 (67%) of the total employee-related health costs which affect organisations annually in Germany. They present further that in 2009, the total impact for companies operating in Germany was about 129 billion euro, which is equal to approximately 50% of the total health expenses of the Federal Republic of Germany. These financials underline the monetary relevance of managing presenteeism under the umbrella of Corporate Social Responsibility.

Merrill et al. (2012) present a study which builds on the fact that presenteeism impacts the employee productivity. Their research objective was to explore which contribution the workplace environmental factors, the health behaviour and the physical health have on presenteeism. They aimed to find out the causes of presenteeism in order to reduce costs and to achieve a more productive workforce. Within the area of health behaviour, the research survey focused on smoking, healthy eating, fruit and vegetable consumption as well as workout activities. Employees who indicated having difficulties adopting healthy behaviours such as eating fresh fruits, vegetables or other low-fat products, exercising during the workday or who did not believe that the workplace supported them in becoming healthier, showed a higher degree of presenteeism. The study concluded that employees who struggled to consume fruits, vegetables or other low-fat foods during the day were 93% more likely to have an increased productivity loss through presenteeism. Merrill et al. (2012) state further that work-related issues have the greatest impact on presenteeism, and management therefore has to pay certain attention to this topic. Health promotion programmes may lead to the implementation of policies which support workplace environments and the intake of healthy foods such as fruits and vegetables. This view is supported through the concept of Corporate Social Responsibility, taking the accountability towards employees and the financials into consideration.

Yang, Zhu and Xie (2016) outline in their work "The determinants of presenteeism" that the employees' health, individual factors as well as stress-related factors at work are the main determinants of presenteeism. The stress-related factors at work make a significant contribution to presenteeism and may need to be split into sub-factors, such as high work demands (workload schedule), work control (work-life balance) and poor social climate (interpersonal relationships).

This split of the variables is consistent with a World Health Organization (WHO) report discussing a healthy workplace framework and model (Burton, 2010). The work demand is understood as the amount of work the employees have to manage within a fixed period, such as the business day. This also includes the type of work, the working hours and the decisions about payment and promotions. The work control is seen as the employees' actual required decisions in prioritisations between work and lifestyle. This includes personal life, any job stressors and an effort-reward balance. The social climate is perceived as the employees' experienced work conditions, such as any discrimination, the support from colleagues or supervisors as well as psychosocial work environment (Yang, Zhu and Xie, 2016). With this work, Yang, Zhu and Xie (2016) introduce guidelines for avoiding stress-related factors at work and presenteeism among

the employees. It is therewith recommended that business organisations ensure appropriate working hours, high decision latitude, freedom in the work schedule and correct behaviour towards the employees, including respect for personal lives, support in work and comfortable interpersonal relationships as well as workplace conditions.

1.4 Research Justification

The performance of a for-profit organisation depends on various factors such as management style, market position and other resources (Grant, 1991; Hodge, Graeme; Greve, 2007). Galer, Vriesendorp and Ellis (2005) confirmed in their work that the workplace environment is a resource impacting the organisational performance. The workplace environment is understood as a relevant element in the management of employees (Chandrasekar, 2011).

The organisational accountabilities are introduced within the concept of Corporate Social Responsibility. As part of its Corporate Social Responsibility, an employer has to take care of its employees (Jain, Leka and Zwetsloot, 2011; Kolbe-Alexander et al., 2014) and to ensure that it stays financially healthy (Piper, 2010). The Corporate Social Responsibility interrelation between the financial perspective and social perspective forms the fundament of this research. Of specific interest is how organisations manage their accountability towards their employees and their financials at the same time. To comply with employee accountability, management of the workplace environment is necessary, which may consume money and therefore impacts the financials.

An effective cost management and remaining financially healthy in the long term receives critical management attention (Hamilton, 2012). Organisations may therefore need to ensure a return on investment for expenses. This includes investments into the workplace environment in order to fulfil the Corporate Social Responsibility towards the employees (Dearden, 1969; Watson et al., 2016). The costs occurring through presenteeism might be a factor to be used for return on investment considerations in order to justify interventions in the workplace characteristics (Friedlob and Plewa, 1996; Watson et al., 2016), if such costs can be reduced.

Changes in the workplace characteristics affecting the organisational performance are often linked to additional costs. Such costs might be for physical improvements such as air-conditioning, new tables or better quality of the canteen, but psychosocial improvements are also linked to costs, for instance through team building activities, time for peer support or

changes in the culture (Lund et al., 2006; Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, 2010; Gilbert et al., 2015). Research studies have shown that the workplace environment and its characteristics play an important role in the management of employees (Jain, Leka and Zwetsloot, 2011; Kolbe-Alexander et al., 2014).

The worksite is considered as strategically important in increasing fruit and vegetable consumption, as a large part of the adult population spends about a third of their day time at work (WHO, 1995). As costs are a key element in organisational profitability and its economic responsibility within Corporate Social Responsibility (Voiculescu and Yanacopulos, 2011), the created or modified workplace characteristics impacting fruit and vegetable intake require detailed attention in the evaluation (Stulz, 2005).

The issue faced by Maar and Fricker (2011) is that presenteeism leads to high costs for organisations. Presenteeism is seen as a cost factor which impacts the organisational financial performance (Strömberg et al., 2017). As more factors now impact employee productivity, such as an increased number of pressures and stressors caused by international market demands, job uncertainty or multi-tasking requirements, presenteeism is seen as a management challenge in today's business world (Aronsson, Gustafsson and Dallner, 2000; Lohmann-Haislah, 2012). The work from Merrill et al. (2012) confirms that affecting employees' fruit and vegetable consumption reduces presenteeism and its related costs.

Bringing the following factors together builds the fundament for the justification of this research.

1. Organisations are accountable for their employees and the financial organisational health (Voiculescu and Yanacopulos, 2011).
2. The workplace characteristics are critical factors for employees and impact the organisational financial performance due to costs for investments (Jain, Leka and Zwetsloot, 2011; Kolbe-Alexander et al., 2014).
3. Presenteeism leads to high costs for organisations every year and is a management challenge in today's time (Maar and Fricker, 2011).
4. Presenteeism can be reduced through the consumption of fruits and vegetables (Merrill et al., 2012).

The purpose of this study is to learn about workplace characteristics affecting the intake of fruit and vegetables of employees at work positively. This includes considering driving forces in specific areas of the workplace characteristics. Costs of presenteeism being reduced through workplace characteristics affecting the intake of fruit and vegetables may justify the investment into such workplace characteristics.

Kurschner (2019) and Shin (2014) explain that the organisational roles with administrative or management activities have different frame conditions for the employees. This includes, for instance, the salary or the time in the office. These findings indicate the need to consider different employee groups or positions in terms of the workplace characteristics affecting the actual fruit and vegetable consumption. This view is supported by the work of Lindström et al. (2001). They found that the socioeconomic status makes a difference for employees and is also linked to fruit and vegetable intake. To learn about workplace characteristics affecting the intake of fruit and vegetables of employees at work therefore requires considering differences based on groups of employees.

In this research study, the employees considered are grouped into two main areas. In the first group are employees with an administrative job role (Schreyögg, 2008). In this study, these employees are understood, for instance, as office assistance or customer service (Mills et al., 2007; Tsai, 2011; Watson and Korczynski, 2011). In the second group are employees with a leader job role. In this study, these employees are understood as either a Manager (e.g. Account Manager), Senior Manager (e.g. Team Leader), Executive Manager (e.g. Head of Business) or Owner, Board Member or Similar (e.g. CEO) (Okumus, 2003; Tsai, 2011; Watson and Korczynski, 2011; Harding, Lee and Ford, 2014; Shin, 2014).

Affecting the fruit and vegetable consumption of employees reduces the risk of presenteeism and therefore may impact the financials positively (Merrill et al., 2012). These cost advantages might be used to justify interventions (Watson et al., 2016).

The relevance of changing the work environment in order to increase fruit and vegetable consumption was already identified in an intervention study between 2007 and 2009 in south-eastern Brazil. The research study found that environmental changes such as dish appearance, improvements in presentation, organisation and attractiveness of fruit and vegetable dishes or

educational aspects impact fruit and vegetable consumption in an organisation (Franco, De Castro and Wolkoff, 2013).

In the work titled "Impact of an intervention on the availability and consumption of fruits and vegetables in the workplace" (Bandoni, Sarno and Jaime, 2010) and in the work titled "Workplace health promotion and working conditions as determinants of employee health" (Ljungblad et al., 2014), the authors interpret in their literature that often the actual individual behaviour has received research focus. Both studies focus on the wider workplace environment and indicate the need for future research closing different research gaps in relation to the workplace environment.

This need for further research in the area of the workplace environment is also pointed out in the conclusion of the work of LaCaille et al. (2011). Their work aimed to identify factors which college students noticed as contributing to healthy eating. They conclude that there is a need for further research to understand the opportunity of environmental modifications affecting healthy eating.

The need for further research is also supported by the work of Mills et al. (2007), who evaluated the impact of workplace health promotions on employee productivity and found through an experiment that health interventions yielded a positive return on the organisational investment. They concluded "that a well-implemented multicomponent workplace health promotion program can produce sizeable changes in health risks and productivity" (Mills et al., 2007, p. 45). They additionally indicate that further research is needed in the wider area of interventions in health promotion at work. A similar need for further research is indicated in the work titled "Work-Related Factors of Presenteeism: The Mediating Role of Mental and Physical Health" (Pohling et al., 2015). This work found that elements such as workload, control, reward and values impact presenteeism and explains the importance of work-related factors as drivers of presenteeism. Beyond this, the study points out that there is a need to clarify the impact of work-related factors on presenteeism.

Explaining the workplace characteristics may require considering the regional area of the employees because regional differences in the workplace environment exist (Service, 2004). Taking this into consideration is relevant for the discussion of findings as changes recommended may depend on the region where the employees are working. Various opportunities exist to design a workplace in today's business work-life, while employees have different requirements

of a workplace which an employer is required to take into consideration today. Examples are virtual business teams, mobile working, flexible working hours, online-feed communication, open-space rooms or modern technology devices (Heinrichs et al., 2016).

For the purpose of this research, it is necessary to verify on the one hand whether the organisational influence on employee behaviour is strong enough to affect employee fruit and vegetable intake. On the other hand, it is necessary to verify whether employees are open in their attitude to accepting related changes in the workplace environment. The work from Greaves, Zibarras and Stride (2013) found that changes in the workplace environment lead to a change in the actual employee behaviour. In their study, they explored the employee intention to switch off the PC when leaving, to use videoconferencing instead of travelling and to recycle as much as possible. As a result of their work, interventions were designed to improve the actual behaviour. This supports the purpose of this research study and outlines that changes to employee behaviour can be achieved through changes in the workplace environment. In addition, the work from de Bruijn (2010) and Blanchard et al. (2009) found that employee behaviour can be influenced in terms of their actual fruit and vegetable intake. This also supports the purpose of this research study as a rational that the intake of fruit and vegetables can be affected.

This is further supported through the research studies of Kothe, Mullan and Butow (2012), Shaikh et al. (2008) and Conner, Norman and Bell (2002) exploring the context of healthy eating or the consumption of fruit and vegetables by adults. These research studies have in common that the management or the influence of behaviour show an actual positive impact on the eating behaviour. A supporting conclusion is provided by the work of Mills et al. (2007) introduced above. Through evaluating the impact of workplace health promotions on employee productivity, they found that health interventions yielded a positive return on the organisational investment. This research may allow to deduce that a return on investment is achievable and that organisations are able to affect employees' behaviour towards health-related aspects. These described research studies and the confirmed possibility to influence employee behaviour provide the supporting condition that presenteeism might be influenceable through organisational activities and workplace characteristics.

The purpose of this research is also supported through the finding from another research study, which states that employees working in organisations offering a greater number of health promotion opportunities were more likely to accept a change in their behaviours to consume

fruits and vegetables (Kolbe-Alexander et al., 2014). This finding underlines the organisational power to influence the eating behaviour of employees. This research builds on the understanding that the implementation of an intervention, which is understood as an effect on fruit and vegetable consumption caused through the explored workplace characteristics, depends on the actual existing workplace environment (Armitage and Conner, 2001).

In addition to the financial benefits to the organisation, it should be mentioned that the consumption of fruit and vegetables impacts the general employee health (Glanz, Rimer and Viswanath, 2008). The individual employee health is not in the scope of this research, but it demonstrates the wider benefits that fruit and vegetable consumption may have. In the academic literature, research studies discuss the organisational opportunity of workplace interventions to influence employees' health (Kilpatrick et al., 2014). These research studies demonstrate the academic interest of the wider employee health and food consumption as a topic of investigation. This also supports the purpose of this research of understanding how workplace characteristics can affect the intake of fruit and vegetables.

1.5 Research Area

For the explanation of the workplace characteristics affecting the fruit and vegetable intake at work, the workplace culture is of interest, which depends on the regional area (Service, 2004). The regional acceptance of workplace characteristics often depends on a country-specific behavioural and cultural situation (Sorensen, Linnan and Hunt, 2004). The existing differences in regional acceptance therefore require respect of these situations and exploration of the workplace characteristics for a demographic region. This condition drives the regional focus of this research and leads to a regional concentration aiming to cover on the one hand a broad employee range and on the other hand the opportunity to take multiple workplace characteristics into account.

The aim is to understand the characteristics of the workplace which an organisation can create or modify in order to provide practical recommendations and to affect fruit and vegetable intake. It is important to make sure that the workplace characteristics are within the ownership and responsibility of the organisation (Robroek et al., 2009). Employees having an intrinsic disinterest towards health and healthy food might be not approachable through interventions in the workplace characteristics and might be not be within the organisational responsibility (Sansone and Harackiewicz, 2000; De Bruijn, Wiedemann and Rhodes, 2014). An organisation is

not supposed to influence each employee, especially if some employees have no interest in being influenced in their behaviour (Ajzen, Netemeyer and Ryn, 1991).

This means that this research must study an area where employees tend to be open to being affected in their fruit and vegetable intake. A research area where employees have an intrinsic disinterest towards the consumption of fruit and vegetables might be not appropriate, as the interventions recommended are not likely to be successful.

A recently published statistic found that in 2015 9.38% and in 2016 8.99% of the German population is not interested in health or fitness at all. The decreasing disinterest from 2015 to 2016 shows a positive development of the interest (Statista, 2018). The statistic shows that in fact more than 90% of the German population shows an interest in health and health-related aspects. This indicates that there is only a small percentage of employees who might not be willing to be influenced by their employer in terms of their fruit and vegetable consumption. In combination with the work of Kolbe-Alexander et al. (2014), who found that employees were more likely to eat more fruit and vegetables when the employer offered a greater number of health promotion facilities, Germany is seen as valid to explore the workplace characteristics affecting the fruit and vegetable intake.

There are not many studies to be found which are concerned with the fruit and vegetable intake and the workplace characteristics for organisations based in Germany or the German-speaking area apart from the work of Nöhammer, Schusterschitz and Stummer (2010), who focus on Austria. Their work explores the work determinants of employee participation in workplace health promotions. The result of their research study suggests focusing on information about the health promotion and the related design of the offered workplace health promotions. With 8.9 million habitants, Austria represents 1.98% of the EU population. With 83.14 million habitants, Germany represents 18.57% of the EU population (excluding the UK) and is the biggest EU economy (Statista, 2020). Germany provides therewith the opportunity to cover a broad employee range with different requirements of workplace characteristics.

Another report from the European Bureau of Statistics Eurostat identified that 7.273 million people were employed in the manufacturing industry in Germany in 2015 (Eurostat, 2018a). Aside from the fact that this industry is the biggest industry in Germany (the second biggest is wholesale and trading with 6.409 million persons employed), it is also the most employing

industry in the European Union. This fact expresses on the one hand the regional focus and on the other hand it forms the industry focus of this research. The manufacturing industry in Germany reports the highest turnover in sales, with 2.051 billion euro across the EU (Eurostat, 2018b). The turnover indicates that money is available in the industry. The average turnover return on sales for a mid-sized company in Germany across all industries is about 7.3% (Statista, 2019). In contrast, in the US, the average EBIT margin across all private industries is between 25% and 30% (Klein, 2016). The proposed research has the opportunity to facilitate an EBIT margin adjustment for Germany-based companies compared to US-based companies.

In their study, "Meaningful Work", Lips-Wiersma, Wright and Dik (2016) define the three classes of employee jobs – white-collar jobs, pink-collar jobs and blue-collar job. Such employees holding a manager, a professional, semi-professional or business owner role are classified as the white-collar jobholders, while hospitality, retail, care workers and administration roles are classified as pink-collar jobholders. The labourer and skilled trade roles form the blue-collar jobs. A report based on the 5th European Working Conditions Survey identified that the high-skilled white-collar employees had to deal with a higher rate of presenteeism than other employee classes (Chiara Ardito et al., 2012). The rate for the white-collar job class was at about 50%, whereas the other job classes showed a rate between 35% and 38% (Garrow, 2016). This research therefore considers the class of white-collar job employees. The findings of this research study might not be applicable to the whole organisation, but the research study provides the advantage of identifying required workplace characteristics affecting the fruit and vegetable intake of specific employee groups. This does not mean that any findings for the white-collar employees do not bear the opportunity of having a positive effect on other employees holding a pink-collar or a blue-collar job. The findings might be beneficial for more employees than those in a white-collar job.

1.6 Research Gap and Research Questions

In the academic literature, the design of the workplace characteristics is evaluated in multiple studies. For instance, the work of Goffe and Jones (2013) explored the imperatives of the best workplace on earth. They identified the workplace impacting factors with the headlines "let people be themselves", "unleash the flow of information", "magnify people's strengths", "stand for more than shareholder value", "show how the daily work makes sense" and "have rules people can believe in". They concluded that the workplace characteristics are the source leading to a realisation of the full organisational potential, which is understood as having no loss in

productivity. Their research study links the challenges of presenteeism, understood as a loss in productivity, with the management of the workplace characteristics. This is supported by research studies over the last decades, which engaged with the drivers of employee motivation in relation to work productivity (Cerasoli, Nicklin and Ford, 2014). Thus, the Harvard Business Review classic journal from Herzberg discusses the characteristics of the workplace environment which lead to a higher employee motivation in order to drive organisational profitability (Herzberg, 1987, 2003).

As mentioned earlier, the social climate at work, including the workplace conditions, are determinates of presenteeism (Yang, Zhu and Xie, 2016). The costs of presenteeism might be reduced through an intervention in the workplace characteristics. As costs for investments are a key element of organisational profitability objectives, the returns on such investments are critical for most decision makers (Stulz, 2005). Previous research studies already demonstrated that a return on investments is achievable for investments in employee focused determinates, such as health promotions (Mills et al., 2007).

In the research study expressing the positive contribution of fruit and vegetable intake on presenteeism (Merrill et al., 2012), it was also outlined that "the need to create supportive policies and environments is a fundamental aspect" (Merrill et al. 2012, p. 299) as well as that workplace support is required to reduce presenteeism. This approach is supported by another research study, which investigates the relation between the workplace environment and employee health behaviours (Kolbe-Alexander et al., 2014). Sorensen, Linnan and Hunt (2004) started to investigate the opportunities within the workplace environment to increase fruit and vegetable consumption. In their work, it is stated that the success of a change in fruit and vegetable consumption depends mainly on the organisational commitment.

These findings and the current academic knowledge are taken forward to close the research gap. A need is seen to extend the knowledge towards workplace characteristics.

The research gap recognised in the academic literature is on the one hand a limited understanding about which workplace characteristics should be created or modified in order to influence employees' fruit and vegetable consumption at work, as well as whether there are barriers or hurdles holding employees back from the intake of fruit and vegetables which can be overcome through specific workplace characteristics. On the other hand, the academic literature

presents knowledge about different employee status and groups in organisations but is weak in demonstrating whether there are differences to be taken into consideration when managing the workplace characteristics of such groups.

This research gap is supported by the work of Ljungblad et al. (2014), which concludes that the effect of interventions executed within the organisational environment has not been studied enough compared to individual behavioural preventions. This conclusion underlines the need for a research study extending the understanding and the knowledge about the management of workplace characteristics supporting employee fruit and vegetable consumption at work.

This research gap is the fundament for the two research questions of this study:

Research question 1: Which workplace characteristics affect employees' fruit and vegetable intake at work?

This means that it is essential to explain the workplace characteristics, which employees require in order to consume fruit and vegetables in the office. The aim is to identify elements of the workplace environment which are relevant to and affect the actual fruit and vegetable intake of employees.

Research question 2: Are there differences to be considered within the employee hierarchy in terms of the required workplace characteristics?

This means that the research verifies whether there is a need to consider different elements of the workplace environment based on the employee hierarchy in order to affect the employees' fruit and vegetable intake at work. The aim is to understand which employees are affected by which workplace characteristic.

The main focus of this research is to understand the workplace characteristics existing in the manufacturing industry which are relevant for white-collar employees. The introduced research questions are designed in a way which explains different workplace characteristics while considering that an organisation has multiple employee hierarchy positions. The research thereby sets the focus on understanding "what is needed" at the workplace to affect the actual intake of fruit and vegetables at work. The study therefore considers existing workplace

characteristics and verifies whether these affect the actual intake. It is the understanding of this thesis that different factors, such as the behaviour of employees, can impact the intake of fruit and vegetables, but instead of extending theory about managing the employee behaviour, this research puts the workplace environment and its characteristics in the spotlight. In this thesis, the management of workplace characteristics in order to affect the intake of fruit and vegetables receives the main consideration.

This focus is seen as urgent because of the existing presenteeism among white-collar employees, like in the German manufacturing industry. The report from Steinke and Badura (2011) about presenteeism and the related German stress report from Lohmann-Haislah (2012) show that presenteeism is becoming a more relevant topic in the management of employees due to the changes in the working world, such as more globalised work, changes through the digital transformation or multi-job and multi-work activities. Presenteeism is an increasingly prominent factor in today's economic environment (Maar and Fricker, 2011; Steinke and Badura, 2011; Lohmann-Haislah, 2012). Exploring ways and opportunities to reduce presenteeism is seen as part of the employer's Corporate Social Responsibility. On the one hand, in order to create a better environment for employees (Jain, Leka and Zwetsloot, 2011) and on the other hand, to reduce costs in order to stay competitive (Voiculescu and Yanacopulos, 2011; Mauboussin, 2012). Labour management is well discussed in the academic literature (Delmas and Pekovic, 2018) and new perspectives are needed to affect the intake of fruit and vegetables leading to lower rates of presenteeism and thereby reduce costs. Understanding whether changes of the workplace characteristics reduce costs for the organisation and improve the workplace environment for employees at the same time is a topic to be explored under the umbrella of Corporate Social Responsibility.

1.7 Structure of Thesis

This thesis is divided into six chapters. The chapter called "Introduction" is used to illustrate the academic and practical relevance of the research towards employees' fruit and vegetable consumption at work. This chapter builds the foundation for the discussion and the practical recommendations once the data evaluation is outlined. It explains the term "presenteeism", which is critical for the business-impacting relevance of the findings. This chapter introduces the research gap, research questions and the research area in order to set the context in relation to the research scope.

The second chapter is concerned with the literature review and explores the existing academic knowledge under the umbrella of the research area and introduced academic literature gap. The literature review introduces workplace characteristics and explains their breakdown into the two dimensions of psychosocial and physical factors. These two factors are presented to gain a deep understanding of which workplace characteristics form the workplace environment. The research scope then explains which workplace characteristics are taken into consideration for this research. This chapter ends with a presentation of academic literature knowledge about the workplace characteristics selected for the explanation into affecting the fruit and vegetable intake at work.

The third chapter is about the research approach. It introduces the research philosophy and methodology and illustrates the researcher's understanding of the research design. It expresses the methods used to collect the required data. In addition, this chapter outlines the data collection process, including the pilot survey, the adaptions and the survey collection process. This chapter also explains the questions asked in the survey, and which types of questions are used. An overview of the survey participants is given to verify that they are within the set scope of the research.

In the fourth chapter, the data evaluation is presented. It describes the statistical findings using a regression analysis for the quantitative collected data through the online questionnaire. In addition to this data, the qualitative data collected through open-ended questions are reviewed in depth and put into context in terms of the variables collected.

The fifth chapter is about the discussion of the findings. It points out the impact on the academic knowledge and indicates the practical implications of this research. The chapter offers activities and thoughts in order to affect employees’ fruit and vegetable consumption at work. The quality of the research is reviewed, the limitations of the research are expressed, and future work indicated.

The sixth chapter draws the conclusion on what is now known about the workplace characteristics in terms of employees’ fruit and vegetable intake at work in order to reduce the costs of presenteeism. This chapter highlights the theory, methodology and practice as well as the influence of choices made in the research strategy. The chapter concludes with the

opportunity organisations may have of affecting their employees' fruit and vegetable consumption through the management of the workplace characteristics.

1.8 Brief Summary of this Chapter

This chapter introduced background information in terms of this research study. Corporate Social Responsibility is presented as an aspect of a wider management responsibility with financial and social elements. As a financial and social element of organisational concern, presenteeism is introduced. Presenteeism is a loss in employee productivity which can be reduced through an increased fruit and vegetable intake.

In this chapter, the research purpose is illustrated to learn about workplace characteristics affecting fruit and vegetables intake at work positively. There is a gap in the academic literature as to which workplace characteristics have a potential to affect the actual fruit and vegetable consumption. The related research questions aim to close this gap, taking also different employee hierarchy positions into consideration. In this chapter, the research area is defined as the white-collar employees working in the manufacturing industry in Germany.

In the following chapter, the academic literature is reviewed for a detailed understanding of the existing academic knowledge.

2 Literature Review

The literature review provides a structured overview of the existing academic knowledge of the workplace environment. In this chapter, the workplace characteristics used as variables in this research are introduced and reviewed from multiple perspectives. For each variable, a definition and hypothesis are described.

2.1 Introduction

This research study follows the understanding of Chandrasekar (2011) that the workplace environment impacts employee morale, productivity and engagement. It is therefore an element of core relevance for employees and their behaviour. Workplace environment is a broad term and often differently used in the academic literature. In order to ensure a clear meaning of the terminologies used throughout this study, the workplace environment is understood in this paper as all the surroundings of employees at work. Furthermore, this paper is based on the understanding that the workplace environment consists of different workplace characteristics, which can be grouped into psychosocial and physical factors. In other words, the workplace environment is a sum of all psychosocial and physical workplace characteristics (Secret, 2000; Secret and Sprang, 2001; Burton, 2010; Chandrasekar, 2011; Patterson-Silver Wolf et al., 2013).

This research study aims to understand workplace characteristics affecting the fruit and vegetable consumption of white-collar employees in the German manufacturing industry. It is necessary to review the knowledge about the workplace environment and its characteristics in the academic literature. In the centre of the literature review is the academic knowledge about organisational interventions in employees' behaviour and performance. This perspective is seen as feasible because of the introduced work of Merrill et al. (2012), who found out that the intake of fruit and vegetables reduces the likelihood of presenteeism. Presenteeism is a cost factor to companies due to a loss of productivity (Chiara Ardito et al., 2012).

In order to close the research gap and to extend the understanding about workplace characteristics, it is necessary to define the meaning of workplace characteristics and to understand the parameters. For this first step of the literature review process, the organisational perspective on employees' performance is a guiding viewpoint for the choice of the workplace characteristics reviewed.

In a second step (chapter 2.5), the literature is reviewed in light of the selected workplace characteristics. The selected workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication are reviewed in the literature in detail in order to define these for this research and to state a hypothesis related to the research purpose.

2.2 Defining Workplace Characteristics

The term "workplace characteristic" is discussed with different meanings and interpretations in the academic literature. Thus, in their study "Workplace characteristics, depression, and health-related presenteeism in a general population sample", Wang et al. (2010) understand that the workplace characteristics are psychosocial factors. They found through a cross-sectional study of 4,032 employees in Canada that a link between the job performance and the workplace environment exists. In their work, presenteeism is considered as an impacting factor on the job performance, which makes this work an appropriate fundament for this research. For their research, the Job Content Questionnaire is used to assess the workplace environment with the factors work stress, decision authority, psychological demand, job insecurity and supervision/co-work social support. These elements are of key interest when evaluating the workplace environment in accordance with the consumption of fruit and vegetables at work, as the paper from Burton (2010) on behalf of the WHO shows. Burton (2010) explains that there is a wide understanding of the term "healthy workplace" in the literature and the WHO provides a "scientific basis for a healthy workplace framework" (Burton 2010, p. 1).

The WHO understands the workplace environment as the following: "A healthy workplace is one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of workers and the sustainability of the workplace by considering the following, based on identified needs: health and safety concerns in the physical work environment; health, safety and well-being concerns in the psychosocial work environment including organization of work and workplace culture; personal health resources in the workplace; and ways of participating in the community to improve the health of workers, their families and other members of the community" (Burton 2010, p. 2).

Secret and Sprang (2001) have a different view and focus on the workplace characteristics, discussing in their research the effects of family-friendly workplace environments on work-family stress of employed parents. They see the workplace characteristics more as an umbrella of the organisational infrastructure like employment type, organisational size or organisational

sector. The "easily identified, tangible and constant conditions of work" are reflected in their model (Secret and Sprang 2001, p. 25). The viewpoint of Secret and Sprang (2001) is not taken forward, as this research aims to dive into the details of the workplace characteristics, which seems not to be supported by using the workplace characteristics as an umbrella of the organisational infrastructure.

The definition of a healthy workplace given by the WHO (Burton, 2010) is taken as a fundamental point of view in the further evaluation and discussion of this research. The most relevant aspect is the differentiation between the physical and the psychosocial work environmental factors. This differentiation is a viewpoint used in various other academic literature as well. An example of an academic work following this differentiation into the physical and the psychosocial work environmental factors is the work of Watters, Satia and Galanko (2007). Already 3 years before the WHO definition was published, they looked at the psychosocial factors related to the fruit and vegetable intake in the US. Watters, Satia and Galanko (2007) believe that such factors are potentially critical predictors of fruit and vegetable intake. The physical work environment is considered in the work from Lund et al. (2006) 4 years before the WHO definition, Lund et al. (2006) looked primarily at the physical work environment but identified the need to study the psychosocial related determinates, for the evaluation of the risk factors for a long-term sickness absence.

More recent research work is built on the split between physical and psychosocial work environmental factors. The work of Ljungblad et al. (2014) aims to explore the effects of psychosocial work conditions and workplace health promotion in Sweden on the health of employees, and their sickness absence, working in social care organisations. The physical work environment is used in the work of Kamarulzaman et al. (2011), who found that the physical workplace environment can impact the employees' behaviour, perception and productivity.

These presented research studies explore either the physical or psychosocial work environmental factors. This means it is required for this research to verify the feasibility to use physical and psychosocial factors at the same time to explore the workplace environment. Only a few studies have taken both factors into consideration simultaneously (Lund et al., 2006).

Lacaille et al. (2011) consider in their work the physical and psychosocial work environmental factors at the same time. They explore factors which are relevant for college students in their

healthy and unhealthy eating behaviour. Considering physical and psychosocial work environmental factors at the same time goes along with the approach of Strömberg et al. (2017), who aimed to identify "wage multipliers that can be used to estimate the costs of productivity loss for employers in economic evaluations, using detailed information from managers" (Strömberg et al. 2017, p. 1). They are referring to physical, psychological and social problems which may arise in the work environment and impact the employee work performance. Also Pohling et al. (2015, p. 1) investigates "the influence of the areas of work life (...) on presenteeism". In their research, the two dimensions of health are physical and mental, with mental to be similarly understood as the term psychosocial used in this research.

The work of McKnight, Phillips and Hardgrave (2009) provides insights into the need to consider the split into physical and psychosocial factors when exploring workplace characteristics. In their research, McKnight, Phillips and Hardgrave (2009) explore if workplace characteristics or job characteristics reduce IT job turnover intentions the most. They have set their focus on four workplace characteristics being key for IT workers: job security, rewards fairness, team information sharing, and trust in senior leadership. Following the understanding that workplace characteristics are separated into physical and psychosocial factors, these four characteristics are seen as psychosocial factors. The study from McKnight, Phillips and Hardgrave (2009) shows that the workplace characteristics are influencing IT job turnover intentions the most, compared to job characteristics. Their work proves that workplace characteristics may have the opportunity to influence the employees' intentions. It underlines therewith the purpose of this study to explain which workplace characteristics affect the employees' fruit and vegetable consumption at work. It confirms that such effects exist in other organisations and on other employee behaviours.

The understanding that workplace characteristics can be separated into physical and psychosocial factors is supported by research studies discussing the approach of workplace environment interventions on employees' health, such as Kilpatrick et al. (2014). They considered physical and psychosocial factors to examine the health targets of employees and their readiness to change for their targets. As the consideration of the physical and psychosocial factors in the health of employees is given in research studies, it makes it feasible and appropriate to consider the physical and psychosocial factors in this research explaining the workplace characteristics affecting the employees' fruit and vegetable intake. This is justified

through the similar objective of executing workplace environment interventions, while solely the purpose of the interventions is different.

In the academic literature, the elements of the workplace environment are discussed, which are defined in this research as workplace characteristics. A wide range of existing workplace characteristics is available in the literature from a performance and health perspective, which have an impact on the employees' behaviour, performance or motivation (Greaves, Zibarras and Stride, 2013; Cerasoli, Nicklin and Ford, 2014). McKnight, Phillips and Hardgrave (2009) named various examples of workplace characteristics like supervision satisfaction, reward fairness, promotion, job security, salary or resource adequacy to be considered in the process of their evaluation. In the work of Pohling et al. (2015), elements such as workload, control, reward, community, fairness and value congruence are mentioned as the main characteristics of the workplace environment. Gilbert et al. (2015) named further examples of workplace characteristics such as light, noise, ergonomic sitting or the office design. These insights demonstrate that the workplace characteristics can be broken down into more specific elements.

The reviewed academic literatures use the same approach as the WHO, separating the workplace environment into the psychosocial and the physical factors. This research therefore applies the approach of separating between the physical and psychosocial work environmental factors. It is seen as feasible to follow this route because the WHO provided an adequate definition of the workplace environment which is accepted in the academic literature. The definition makes it possible to streamline the focus of this research and to consider different perspectives on recommendations affecting the fruit and vegetable intake of white-collar employees.

The physical perspective and the psychosocial perspective of the workplace characteristics guide the further literature review process to evaluate a wide range of workplace characteristics. The workplace characteristics seen as most relevant for this research are selected. These are included for a detailed literature review afterwards (chapter 2.5).

The selection process focuses on the workplace characteristics an organisation is able to manage. This is based on the perspective introduced with the concept of Corporate Social Responsibility. It is necessary to understand which social issues require focus when the organisation attempts to execute a Corporate Social Responsibility strategy (Porter and Kramer, 2006). The organisational accountability towards employees is expressed as part of the social norms.

Workplace characteristics, which are part of the social norm, are therefore seen in the area of organisational influence. This is supported by the results presented in the work from Schein and Ott (1962). They used a questionnaire and the data from 812 respondents to explore whether it is legitimate that a supervisor attempts to influence behaviour or attitude of employees or students. They found out that the more the area aimed to be influenced is related to the job environment, the more it is considered from the questionnaire participants as legitimate. To focus on those workplace characteristics which are in the area of organisational influence is also supported by the textbook "Organizational Change" from Senior and Swailes (2016). It shows the different internal and external triggers for organisational change, such as socio-cultural factors or economic factors. To adapt to changes, an organisation needs to take responsibility towards such changes. The textbook shows that structure and people are two areas of organisational change. The workplace characteristics selected need to be part of this classification and in the range of organisational influence.

2.3 Psychosocial Factors

In this research, the understanding of psychosocial factors of the workplace environment follows the definition of the WHO. This "includes the organization of work and the organizational culture; the attitudes, values, beliefs and practices" (Burton 2010, p. 85). It is supported by the work of Lund et al. (2006). For their research, they measured the psychosocial factors in the work environment with "42 items combined into 13 scales. The scales measured" are "decision authority, skill discretion, quantitative demands, emotional demands, demands of hiding emotions, job insecurity, social support from colleagues and supervisor, management quality, role conflicts, reward in work, meaning of work, predictability in work, and conflicts at work" (Lund et al., 2006, p. 2). The understanding is expanded through the work of Krebs-Smith et al. (1995), which also takes knowledge, perceptions and other factors into account. In addition, Shaikh et al. (2008) found that self-efficacy, social support, and knowledge are strong predictors for psychosocial factors. These research studies demonstrate that different perspectives on the psychosocial factors exist and indicate in which way the psychosocial factors can be broken down.

There is a broad understanding of psychosocial factors shown in the literature. There are multiple clusters and segments used to classify and group such factors. Rugulies (2019) indicates in his discussion that psychosocial factors can be separated into a societal and individual level. Some very early work from the International Labour Organization (ILO) and WHO committee in 1984 (ILO, 1986) states that psychosocial factors refer to the six interactions of work

environment, job content, organisational conditions, workers' capacities, needs and expectations, customs and culture as well as personal extra-job conditions. In their understanding, such factors influence the work performance, which goes along with the understanding of this research. Taking this broad understanding of psychosocial factors into consideration, for this research study, psychosocial factors are clustered into two sections – individual-related psychosocial factors and organisational-related psychosocial factors.

The presented knowledge about psychosocial factors and their clusters shows that interrelations exist. A clear separation of the psychosocial factors is not continuously given. The target of this chapter is to find which psychosocial factors should be taken forward as variables for this research study. It is therefore seen as most relevant to use the clusters of the psychosocial factors only as a framework to ensure that multiple perspectives are covered and reviewed for the selection of the variables, instead of discussing whether the workplace characteristic is an individual-related or organisational-related psychosocial factor. There might be some overlap, which is not relevant for this research. These overlaps do not impact the selection of the workplace characteristics to be explained with this research.

2.3.1.1 Individual-Related Psychosocial Factors

Not all studies have found that psychosocial factors significantly predict the intake of fruit and vegetables. This section of this study discusses different individual-related psychosocial factors explored in the academic literature in regard to the intake of fruit and vegetables. One way to consider the fruit and vegetable consumption is the environment of students and school children, which is seen as co-related to the business environment. Both environments offer a place or an area where people, either students and school children or employees, meet and work to fulfil a purpose or task (Baranowski et al., 1993; Perry et al., 2004; Burton, 2010).

Najimi and Ghaffari (2013) assessed the effectiveness of an intervention aiming to increase the actual fruit and vegetables consumption of students. They identified the students' observational learning as a central element of the intervention and outlined further that the students' education is the key factor impacting the students' actual fruit and vegetable consumption. The research confirms that education of the students in regard to fruit and vegetable consumption leads to improvements in their actual fruit and vegetable intake. The students' education consists of three core elements. Firstly, it includes the knowledge about fruit and vegetables. Secondly, it covers the awareness about health advantages given through the consumption of

fruit and vegetables. Thirdly, it includes the knowledge about opportunities to consume fruit and vegetables. For their assessment, they considered different variables like behavioural capability, self-efficacy, accessibility and preferences. The study shows that self-efficacy, the involvement of parents, knowledge as well as taste were the most relevant variables. For the study, a group of 60 students were split into two groups. Accessibility was not impacted through their intervention. This is different to the findings of other research, such as the work of Story et al. (2008) and Davis Hearn et al. (1998) outlining that accessibility of fruit and vegetables is important in affecting the actual consumption. This difference is seen in the different regional scope of the work, as Najimi and Ghaffari (2013, p. 1239) state that their "results shall be related to family factors such as cultural and economic" background. It is of interest for this research that different findings on the accessibility of fruit and vegetables are given in the academic literature. In addition, Najimi and Ghaffari (2013) found that taste and the personal preferences are important for the success of the intervention in the intake of fruit and vegetables.

Another study explores the conditions for increasing fruit and vegetable consumption among 4th and 5th grade students in the US through a school nutrition education programme (Baranowski et al., 1993). Through a focus group approach, it was found that the school children's fruit and vegetable consumption might be impacted through increased skills in the preparation of fruit and vegetables. The preparation of fruit and vegetables, including the knowledge of recipes, therewith plays a core role. Social factors and the knowledge about fruit and vegetables such as the differentiation between fruit and vegetables, the opportunity for direct influence and the decision making are also presented as elements of relevance. Their work demonstrates the need for communication on fruit and vegetable-related aspects. Communication on the intake of fruit and vegetables is also studied in the work of Glanz and Hoelscher (2004). They executed a restaurant-based study to identify drivers increasing the intake of fruit and vegetables. Communication was identified as a recommended intervention.

Watters, Satia and Galanko (2007) found that interventions influencing fruit and vegetable intake might be more effective if they focus on knowledge about fruit and vegetable benefits and recommended servings. In their research, different factors are used to evaluate the most relevant characteristics leading to an increased consumption of fruit and vegetables. Firstly, the predisposing factors focusing on the individual fruit and vegetable relations are considered. In their understanding, predisposing factors which influence individuals' behaviour in terms of fruit and vegetable intake include "knowledge, attitudes, beliefs, existing skills, personal preferences

and self-efficacy" (Watters, Satia and Galanko, 2007, p. 702). Secondly, the reinforcing factors focusing on individual health objectives are considered. Watters, Satia and Galanko (2007) understand such factors as incentives leading to a repeated intake behaviour. They state that this includes social support, peer influence and other rewards. The predisposing and reinforcing factors may require that employees talk to each other in order to influence each other or to share knowledge. In addition, Watters, Satia and Galanko (2007) identified further that the intrinsic benefits, the social norms and the extrinsic benefits influence the actual consumption of fruit and vegetables. In their work, they separated between fruits and vegetables in order to understand the individual habits, behaviour and desire of people. It was found that the intrinsic benefits and the social norms influence the consumption of fruits, while the extrinsic benefits influence the consumption of vegetables.

Research studies such as the work of Baranowski et al. (1993), Lacaille et al. (2011) or the work of Guillaumie, Godin and Vézina-Im (2010) explore on the one hand the benefits of fruit and vegetable consumption and on the other hand the elements of social and community support influencing fruit and vegetable consumption. These research studies have different focus groups and research objectives but show commonalities in their findings and conclusions. Such commonalities are on the one hand the need to consider the social factors in the actual environment and on the other the knowledge about fruit and vegetables when aiming to affect the fruit and vegetable consumption of individuals. Personal factors like self-efficacy (Perry et al., 2004) shape the actual fruit and vegetable consumption and are identified in different research studies as a relevant factor. Shaikh et al. (2008) concluded that there is strong evidence found for self-efficacy, knowledge and social support but that weak evidence is found for intention, motivation and attitudes as a predictor for a fruit and vegetable consumption of adults. In this context, the research study "psychosocial determinants of fruit and vegetable intake in adult population" (Guillaumie, Godin and Vézina-Im, 2010), which also references Shaikh et al. (2008), observed that habit, motivation and goals, as well as knowledge, are needed to achieve a fruit and vegetable consuming behaviour. This expresses the relation between knowledge and individual attitudes relative to the fruit and vegetable intake of people such as employees at work.

In his work, de Bruijn (2010) aimed to understand the fruit consumption of college students. It was found that the habit strength has an important role within the psychosocial willingness to consume fruits. De Bruijn (2010) stated further that the positive intention to consume fruits is associated with a positive belief in lose weight and in eat less high-calorie snacks. The study

concluded that behavioural beliefs related to staying healthy are needed to consume more fruits. An intervention aiming to increase the fruit and vegetable intake may need to emphasise a sense of controllability under certain circumstances. Under this umbrella of psychosocial factors, it might be necessary to explore the barriers to a fruit and vegetable consumption. Barriers may prevent employees from consuming fruit and vegetables, even if other psychosocial factors encourage the consumption positively. This supports this research study's approach of identifying additional workplace characteristics during the data collection process. However, the work from de Bruijn (2010) is supported by the research study from Geaney et al. (2016) which found that education on a healthy diet at work might be an effective approach. Sharing knowledge appears therefore to impact the habits of employees at work.

A research study among US children investigated the environmental strategies encouraging the children's fruit and vegetable consumption (Perry et al., 2004). The study focused on environmental factors influencing children's behaviour, which can be changed through an intervention. Perry et al. (2004) refer to the researcher Davis Hearn et al. (1998), confirming that the accessibility of fruit and vegetables is a key predictive factor of the environment leading to a fruit and vegetable consumption. Davis Hearn et al. (1998) point out the need to ensure that food is prepared, presented or maintained in a way encouraging its consumption. In their work, the environmental influences on dietary behaviour of children are explored. Under this umbrella, Perry et al. (2004) show that the communication of the service staff in the cafeteria as well as an appealing presentation of prepared fruit and vegetables are the main driving variables. Through the intervention in their work, it was found that the verbal encouragement of consuming fruit and vegetables was an important element. Supportive conditions such as communication are feasible when the access to fruit and vegetables is given.

In the work "Psychosocial and environmental determinants of eating behaviours, physical activity, and weight change among college students: A qualitative analysis" (LaCaille *et al.*, 2011), it is found that many students do not have access to appropriate conditions such as a freezer or food storage to prepare healthier meals. The motivation to eat healthily and exercise self-control and effective time-management are explored as psychosocial characteristics. The research also expresses the need to consider the best time for eating and outlines the influencing conditions such as cost, taste, texture, appearance, convenience and food preparation. These findings demonstrate that accessibility might be impacted by other conditions. These conditions may vary across workplaces and define therewith a wider spectrum of the term accessibility.

Taste is investigated in the academic literature as an important determinate. Seymour et al. (2004) express in their work that improvements of taste as well as attractiveness of healthier food choices require more research due to their overall relevance in the intake of fruit and vegetables. Heim, Stang and Ireland (2009, p. 1220) state in their research that "it is important for children to have repeated opportunities to taste and eat fruit and vegetables". Cohen et al. (1998), for instance, explored three barriers to the intake of fruit and vegetables, which are expenses and general factors, including taste and time.

This presented knowledge about individual-related psychosocial factors indicates that ***Communication*** and ***Accessibility*** should be considered as variables for this research study. Communication is needed because knowledge and individual habits are relevant when explaining the workplace characteristics affecting fruit and vegetable consumption (Shaikh et al., 2008; Geaney et al., 2016). The knowledge about fruit and vegetables and the verbal encouragement to consume impact the actual fruit and vegetable intake (Perry et al., 2004; Guillaumie, Godin and Vézina-Im, 2010; Herbert et al., 2010). To achieve encouragement, an appropriate communication between organisation and employee is required. The organisation can define its communication style (Kamarulzaman et al., 2011), which is an element of direct influence. Communication is therefore seen as a workplace characteristic to be explored in terms of its effect on fruit and vegetable consumption. Accessibility must be taken into consideration as a workplace characteristic to be explained because employees need to be able to consume the fruit and vegetables. This means the right fruit and vegetables must be accessible to consume or be ready to get prepared for consumption (Davis Hearn et al., 1998; Story et al., 2008). It is the understanding of this research that employees' access to fruit and vegetables is an absolute minimum in order to affect the actual fruit and vegetables intake at work.

2.3.1.2 Organisational-Related Psychosocial Factors

In a research study conducted in the US for blue-collar manufacturing employees, Rueff and Logomarsino (2016, p. 32) investigated "the effects of worksite health-promotion interventions on fruit and vegetable intake among manufacturing workers". Social support was found to be an effective area of intervention to increase fruit and vegetable intake. This finding from Rueff and Logomarsino (2016) is supported by the work of McSpadden et al. (2016). With their work, they aimed to understand the role of social support in the consumption of fruit and vegetables. They found that social support is positively related to the actual intake of fruit and vegetables. They

suggest including the existing social network to provide actual social support. For this, they analysed 2,959 adults in the US.

Another perspective supporting the consideration of social support affecting the intake of fruit and vegetables is seen in the education of parents. This is discussed and introduced in different research studies, as parents are a critical influencing component for promoting the intake of fruit and vegetables among students and children. Baranowski et al. (1993) explored how to increase the fruit and vegetable intake of students and included the parents into the process. Berge et al. (2016) explore in their work the effect on dietary quality when parents prepare the food for their families. This underlines the help and support of the surrounding people, such as the parents, to engage with fruit and vegetables. The social support from the parents seems to impact the actual fruit and vegetable consumption. This research study also shows a close interrelation between social activities and the preparation of fruit and vegetables. This is supported by the work of Najimi and Ghaffari (2013), who identified that parents have a social supporting role in shaping the student's behaviour in terms of fruit and vegetable consumption. The social support through parents might be similar to the social support through peers or managers, as it is understood as a psychosocial factor of the workplace characteristics. The workplace of the employee is the office, which can be seen as equal to the school for the student. In both environments, people come together to execute a specific task (Baranowski *et al.*, 1993; Perry *et al.*, 2004; Burton, 2010).

The encouragement of fruit and vegetable intake through the family is discussed in the research "Psychosocial factors associated with Fruit and Vegetables consumption" (Krebs-Smith et al., 1995), which concludes that a link exists between knowledge, preparation, attitude and social support through the family. In the work environment, the social community of co-workers does not have a socioeconomically comparable status like family members, but the community of co-workers has a similar influence to a family towards others within the same work environment (Vanderkam, 2015).

Lacaille et al. (2011) oriented their work towards students' behaviour and referenced the work of Shaikh et al. (2008) exploring the psychosocial predictors of fruit and vegetable intake of adults. Both studies named social support as a psychosocial characteristic or construct which affects fruit and vegetable consumption. Shaikh et al. (2008) conclude further that the psychosocial elements were strong predictors for fruit and vegetable consumption. Lacaille et al. (2011) stated that the management behaviour "leading by example" may also have an influence on actual fruit

and vegetable consumption, which expresses an opportunity for the organisational leadership teams to affect the workplace characteristics aiming to affect fruit and vegetable intake.

In the HealthcarePapers, Service (2004) and Vezina (2004) published their papers discussing workplace culture and workplace prevention of mental health issues at work. In both views, social support is seen as being a factor relevant to affecting the mental health of workers because of the existing trust towards peers or supervisors. Service (2004) focuses on the need to consider the environmental determinants of behaviour, including social policies, workplace culture and community interface as well as employee benefits. Vezina (2004) indicates the need to ensure that the required social support exists within communities, such as the workforce, to prevent employees from having mental health issues. The psychosocial risk factors explored in their work are described as work situation, notably control, workload, roles, interpersonal relationships, career prospects, organisational climate or culture and the interaction between work and private life.

Secret and Sprang (2001) examined the effects of a family-friendly workplace environment. Their research study is based on three hypotheses. The first hypothesis that "working parents who have access to structural components of child care assistance and alternative work arrangements will report less financial stress" is not supported (Secret and Sprang 2001, p. 37). The second hypothesis that parents with access to leave time allowance report less time-based problems was supported. The last hypothesis, which assumes that structural components of alternative work arrangements, leave time benefits, stress management programmes and supervisory support have a negative effect on role strain, is also supported. Secret and Sprang (2001) conclude that an informal supportive work culture is required to ensure that the workers and their families benefit from a family-friendly work environment. This is related to the work from Lacaille et al. (2011), who consider the lack of time to consume and the lack of healthy options as relevant characteristics within their discussion on the availability of fruit and vegetables. They see the preparation of fruit and vegetables as a factor under environmental characteristics, which are similar to the physical factors defined for this research. More time because of a family-friendly workplace environment might reduce the lack of time for fruit and vegetable consumption.

This presented knowledge about organisational-related psychosocial factors indicates that ***Social Climate*** should be considered as a variable for this research study. The social support in the intake of fruit and vegetables makes a difference in the actual consumption (Rueff and

Logomarsino, 2016). An organisation is accountable for establishing an organisational culture and defining how employees interact, operate and work together. This is supported in the work of O'Neill, Beauvais and Scholl (2001), who discuss the use of organisational culture. They propose that different organisational types require different levels of culture. A culture creates and impacts the social climate within a team, a group of employees or an organisation. The Social Climate is created by the employees and defined through their shared perceptions (Glisson, 2015). The leadership style is a factor of the social support impacting the actual climate (Ekvall and Ryhammar, 1998). Therefore, organisations have a core stake in the definition of the workplace Social Climate and are able to influence this climate. The Social Climate may impact how employees support and talk to each other or offer help and guidance. The Social Climate is therefore seen as a workplace characteristic required to be explored in terms of its effect on the consumption of fruit and vegetables.

2.4 Physical Factors

In this research, the understanding of physical factors of the workplace environment follows the definition of the WHO. This includes the facilities that "can be detected by human or electronic sense" (Burton 2010a, p. 84). It is supported by the work of Lund et al. (2006). They used 11 questions to explore the risk factors for long-term sickness absence because of the physical environment. These include uncomfortable work positions and the physical workload. This understanding is expanded by the work of Chan and Koh (2007) and Vischer (2007). In their work, the physical workplace environment is presented as the hard factors, the touchable items and equipment. It includes the physical conditions and interior of the office such as furniture, air or products (Burton, 2010; Leblebici, 2012).

In their work, DeCosta et al. (2017) point out that it is necessary to ensure that food is present in the immediate environment of the consumption. They explore with their work the eating behaviour of children and how it can be influenced. They mention fruit and vegetables as a food whose consumption can be positively influenced through a greater availability. It is recognised in this research that availability, in relation to the consumption of fruit and vegetables, is investigated a lot in the academic literature considering different target groups, such as school children or students (Baranowski et al., 1993; Asada et al., 2017).

In the work of Perry et al. (2004), it is explored whether an change in fruit and vegetable consumption can be achieved through interventions in the cafeteria of schools. Increasing the available fruit and vegetables is one activity in the intervention programme. Perry et al. (2004)

refer in their work to Davis Hearn et al. (1998) and discuss the availability of fruit and vegetables while looking at their accessibility at the same time. They thereby demonstrate the close relation between these two factors.

In a research aiming to explore ways of increasing the fruit and vegetable consumption among 4th and 5th grade US students, the availability of fruit and vegetables is discussed as the most relevant factor (Baranowski et al., 1993). For the work of Baranowski et al. (1993) students were divided into focus groups with the objective of identifying factors which lead to an increased fruit and vegetable consumption. They conclude that the availability of fruit and vegetables is an important factor to increase the students' intake as well as that it is necessary to provide skills to the students allowing them to increase the fruit and vegetable availability. The result of the research expresses that the chain of availability can be split into two elements. Firstly, the institutional level, which is responsible for the purchase and the preparation. Secondly, the individual level, where the responsibility is seen in the selection and the consumption. The conclusion of the research is that availability is a core element when it is aimed to increase the actual fruit and vegetable consumption. This underlines the need to have fruit and vegetables present. Without available fruit and vegetables, it is difficult to force an actual consumption.

In the Denmark-based research of Lund et al. (2006), the risk factors for long-term sickness absence in the physical work environment are explored. Absenteeism is the counterpart of presenteeism in the academic discussion about sickness leave. Aronsson, Gustafsson and Dallner (2000) found that groups with a high sickness presenteeism also show a high sickness absenteeism. As fruit and vegetable consumption has a positive effect on presenteeism and this section aims to understand which physical factors affect the actual intake, factors in absenteeism discussed in the academic literature might be also relevant for presenteeism. However, Lund et al. (2006) indicate that the employee's gender shall be considered in the evaluation of the required physical workplace conditions. Women show an increased risk "when exposed to extreme bending or twisting of neck or back, working mainly standing or squatting, lifting or carrying loads, and pushing or pulling loads" (Lund et al. 2006, p. 3). For men, "exposure to extreme bending or twisting of neck or back, working mainly standing or squatting, lifting or carrying loads, and pushing or pulling loads were significant risk factors" (Lund et al. 2006, p. 3). In this work from Lund et al. (2006), the physical workplace conditions are considered differently in terms of their intensity and their priority from a gender point of view. Lund et al. (2006) confirm with their work that uncomfortable working positions, physical workload and increased

risk of sickness absence are associated with each other. Uncomfortable work positions, lifting or carrying loads and pushing or pulling loads are risk factors in sickness absence.

The work of Kamarulzaman et al. (2011) discusses similar findings. Kamarulzaman et al. (2011) explore the influence of the physical office environment on employees' performance. They conclude that a wide range of factors such as temperature, air quality, layout of workspaces, plants, lightning, noise and many others have an influence on the employees and their actual behaviour. This expands the findings of Lund et al. (2006) that the physical work environment is not only about working positions or the physical workload. The physical work environment covers a wide range of determinates which are relevant for employees. This perspective is supported by the report "Workplace Design for Well-being" from Gilbert et al. (2015). They explain that adequate ergonomic standards reduce the risk of physical injuries in the office. They propose a wide range of elements to design the workplace including noise protection, flexible workplaces and lightning. The rational to use this academic literature as a source for workplace characteristics to be considered in this research is seen in the impact of the physical workplace characteristics on employee behaviour. The purpose of this section is to identify workplace characteristics with an effect on the employees' fruit and vegetable intake behaviour.

This presented knowledge about organisational-related physical factors indicates that ***Availability*** and ***Workplace Design*** should be considered as variables for this research study. Availability is reported in the academic literature as a critical element within the area of the fruit and vegetable evaluation. The understanding of this research of these factors is that fruit and vegetables must be present for consumption (Davis Hearn et al., 1998; Story et al., 2008). To ensure that fruit and vegetables are physically available is seen as an absolute minimum in order to affect the actual fruit and vegetable consumption. Knowing the relevance of Availability and its close relation to Accessibility, it is seen for this research as required to consider Availability as a variable in explaining the workplace characteristics. Workplace Design is taken forward as a variable because of the social responsibility an organisation has towards its employees. An organisation is accountable to create a working area which supports and protects the employees' health. The ergonomic conditions of a workplace impact the employees' health at work and help organisations to protect their employees (Gilbert et al., 2015). The required employee attitude and behaviour towards the consumption of fruit and vegetables (Riebl et al., 2015) might be influenced through the Workplace Design (Kamarulzaman et al., 2011). Organisations are able

to influence the actual design, standards and environment of the workplace, considering the interior or the physical facilities (Burton, 2010; Leblebici, 2012).

2.5 Research Scope

The literature review of the psychosocial and physical factors of the workplace environment shows that most available research considers elements affecting the fruit and vegetable intake separately. No studies are found exploring the impact of workplace characteristics on the fruit and vegetable consumption in coexistence with multiple other workplace characteristics. Some research studies were found which consider two conditions, such as the work from Hutchinson, Howlett and Wilson (2013). They considered free fruit and vegetables paired with peer support. For availability and accessibility, there are also research studies available considering both factors at the same time. It seems that researchers tend to take one or two factors into consideration when exploring the effect on employees' intake of fruit and vegetables. This research will consider multiple workplace characteristics in a coexistence to explain the consumption of fruit and vegetables.

The workplace environment is understood as consisting of the psychosocial and the physical factors. This view supports identifying the workplace characteristics which are assumed to be most relevant in the consumption of fruit and vegetables. The following Figure 1 shows the variables used in this research and their sources.

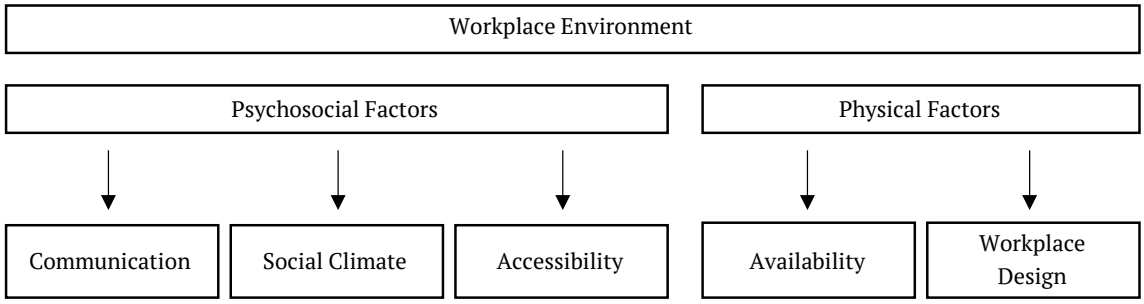

Figure 1 - Deduction of Research Scope

The scope of this research is narrowed down to the variables Communication and Social Climate as psychosocial factors in order to understand the inner-organisational situation. The Workplace Design as physical factor is used in this research as a variable to consider the physical appearance of the workplace environment is given. Accessibility (psychosocial factor) and Availability (physical factor) are used as workplace characteristics which are seen as a minimum condition to

encourage fruit and vegetable intake at work (Cullen et al., 2003; DeCosta et al., 2017). The variable Availability and Accessibility are very close interrelated to each other. This research follows the understanding of the work from Davis Hearn et al. (1998) that Availability means the physical presence of the fruit and vegetables, while accessibility means the presentation, preparation or maintenance of fruit and vegetables enabling or encouraging its consumption. Availability is classified as a physical factor, as it is required that the fruit and vegetables are physically approachable and are therefore a touchable item for the employees in the office. Being a touchable item provided by the employer is comparable to other touchable items in the office such as furniture. Accessibility is classified as a psychosocial factor, as it is required that something is done with the fruit and vegetables, and this requires a psychosocial-based interaction. In their understanding of psychosocial factors, the WHO includes "attitudes, values, beliefs and practices" (Burton, 2010) which impact the accessibility of fruit and vegetables. Without, for instance, appropriate values or practices, fruit and vegetables may not be prepared, presented or maintained in a way which encourages their consumption.

The Availability and Accessibility of fruit and vegetables plays a critical role in the literature review of fruit and vegetable consumption. Alinia et al. (2011) found that the consumption of fruits at work can be increased through combined fruit Availability and Accessibility. This is important to take into consideration and is supported by the work of Cohen et al. (1998). They explored barriers to the intake of fruit and vegetables which indicate an interrelation between Accessibility and Availability. Such barriers are expenses, Availability and general factors, including taste and time (Accessibility).

As a next step, the workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication are reviewed in detail. Before this detailed literature is presented, it is necessary to separate the office, the workspace and the workplace. This research understands the office as the building or the buildings of the employer, where the workspace of the white-collar job employee is located. The workspace is the area in the office where the employee works and where the employer provides the workplace. The workspace is for instance a room which the employees share or the corridor in the office. The workplace is the area in the workspace where the employee executes the job-related activities and where the employee's desk is located (Oldham and Rotchford, 1983; Myerson and Bichard, 2010).

2.5.1 Availability

Availability is an element with a significant influence on employee fruit and vegetable consumption (Menozzi and Mora, 2012; Aggarwal et al., 2014). One of the earliest research studies evaluating fruit and vegetable consumption was published in 1999 and expresses that a barrier to fruit and vegetable consumption is a lack of Availability (Baranowski, Cullen and Baranowski, 1999). It is found that the Availability of fruit and vegetables is a key factor influencing children's consumption as well as that for adults, the Availability of fruit and vegetables in stores is a barrier to its consumption. Availability appears to be impacted by other factors, such as social class. Lower social classes also showed a lower Availability of fruit and vegetables. Baranowski, Cullen and Baranowski (1999) state in their work that for school children, the environmental factors (physical factor) are more important as an area of intervention than psychosocial factors as they have little control in the purchase of the fruit and vegetables. This is the case for employees and their low control or influence on the offer in the employer's canteen. In the understanding of this research, Availability is a physical factor.

In the work from Backman et al. (2011), the effect of available fresh fruits is explored. For their US-based study, they arranged fresh fruit deliveries to cover 1 serving per employee for 3 days. They used two groups to explore the actual effect. The intervention worksite covered 391 employees, while the control worksite had 137 employees. The results show a significant increase in the fruit and vegetable consumption of the intervention group. The studies provide therewith two elements which are relevant for this research. On the one hand, it is shown that Availability is a key influencing factor. On the other hand, the relevance of the workplace is underlined as a place of interventions affecting the fruit and vegetable intake.

Availability is discussed in the academic literature from different perspectives in relation to the consumption of fruit and vegetables. Glanz and Hoelscher (2004) executed a literature-based research report focusing on restaurant-based interventions aiming to increasing the intake of fruit and vegetables. A restaurant shows similarities to a canteen and this work might therefore deliver useful insights on Availability. They report that increased availability of fruit and vegetables includes an increased offer of different fruit and vegetables types, mixed dishes or fruit and vegetable menu options. They found that an increased Availability of fruit and vegetables is one out of six explored restaurant-based interventions. They conclude that there is a need to assess specific strategies towards fruit and vegetables to achieve an increased consumption. This indicates that there is a research need, which is addressed in this research.

The fruit and vegetable-specific strategy mentioned is, in the sense of this research, the arrangement of the workplace environment.

Further insights on Availability are presented in the work of Hendren and Logomarsino (2017). They present an academic review considering 18 studies to explore the impact of worksite cafeteria interventions on the consumption of fruit and vegetables. They included interventions considering changes in the Availability of fruit and vegetables with the impact that an increased fruit and vegetable Availability may improve employee health. Hendren and Logomarsino (2017) list the work of Bandoni, Sarno and Jaime (2010) with the outcome measure "changes in availability". This work aims "To evaluate the impact of an educational and environmental intervention on the Availability and consumption of fruit and vegetables in workplace cafeterias" (Bandoni, Sarno and Jaime 2010, p. 975). With their study focusing on Brazil, they found that interventions in the workplace environment lead to an increased fruit and vegetable Availability of approximately 15%. They demonstrate therewith that interventions on the Availability of fruit and vegetables are effective in achieving an increased consumption of fruit and vegetables.

In the work of Bandoni et al. (2010), the Availability of fruit and vegetables is found to be a significant impacting factor on its consumption at work. The focus area of this research is Brazil. The findings show that interventions in organisations increase the Availability of fruit and vegetables and leads thereby to an increased healthy eating habit of employees. This work underlines the powerful influence that Availability may have on the actual intake of fruit and vegetables at work.

Another research identified environmental strategies to encourage fruit and vegetable consumption among children. The work from Perry et al. (2004) looks at different process evaluation variables associated with an increased fruit and vegetable consumption. The result shows that the Availability of fruit and vegetables on the snack cart has a positive relation towards the consumption of fruit and vegetables. The snack cart is an element used in a very specific situation at school. It underlines that the Availability of fruit and vegetables in a specific location has a positive effect on the consumption.

In exploring strategies to increase the fruit and vegetable consumption at work, Glanz and Yaroch (2004) found in their literature-based research that four key interventions are relevant towards the fruit and vegetable intake. Increased Availability and variety are identified as

effective strategies in the academic literature. They focused on grocery stores in the US. They conclude that research is needed to evaluate effective strategies to affect the fruit and vegetable intake. This research is fulfilling this needed through its focus on the workplace characteristics.

Definition of Availability: In the understanding of this research, Availability means that a range of fruit and vegetables are present for consumption in the canteen, during meetings or at other locations in the office. Fruit and vegetables which are not available cannot be consumed.

This definition goes back to the definition given by Davis Hearn et al. (1998), who define Availability as the situation where foods are present. This is the best definition, even if it is about 20 years old. This understanding is supported in the work of DeCosta et al. (2017). In their used definition, Availability means that food is present in the immediate environment of the consumption.

Hypothesis 1: White-collar employees' fruit and vegetable intake is affected positively by Availability.

2.5.2 Accessibility

Accessibility is explored a lot in the academic literature for different target groups, such as school children or students (Baranowski et al., 1993; Asada et al., 2017). For this research, the variable Accessibility is considered in the light of the need to have fruit and vegetables available in a consumable condition (Story et al., 2008). Mittmann et al. (2014) found that children consume more fruit and vegetables when these are prepared and ready to eat, for instance cut into pieces. In their work, they aimed to explore the determinates of the intake of fruit and vegetables which are required to plan interventions. They took 1,376 children into consideration in Germany. This finding from Mittmann et al. (2014) demonstrates that Accessibility and Availability depend on each other and are interrelated. Fruit and vegetables must fulfil an Accessibility and an Availability to be ready for consumption.

Hutchinson, Howlett and Wilson (2013) reviewed the impact of free fruits at the worksite on the employees' fruit and vegetable consumption. They understand free fruits as a feasible element of Accessibility. Their research confirms that the access to free fruits has the opportunity to increase the employee fruit intake. They considered 75 employees in the research and used a target group approach for the exploration.

In the work from Alinia et al. (2011), it is explored whether the workplace is a feasible location to increase the actual fruit consumption of employees through a minimal fruit programme. They considered 8 Danish workplaces with 124 employees in total. Through making fruits free and easily accessible in a room which every participant can enter (reception or kitchen), the intervention is designed. Alinia et al. (2011) conclude that this minimal intervention approach leads to an increased fruit intake of employees. The formation of Accessibility and an easy approach is illustrated with this finding from Alinia et al. (2011).

Lien, Lytle and Komro (2002) apply the Theory of Planned Behaviour to investigate its capability to predict the actual fruit and vegetable consumption of young adults. They found that the barriers and the intention have significant impact on the behaviour of consuming fruit and vegetables. They name Accessibility as an external barrier which impacts the behaviour of consuming fruit and vegetables. It is explained in their work that an intention to consume fruit and vegetables is required when the fruit or vegetables are available.

This is supported by the work of Najimi and Ghaffari (2013). They found that interventions in nutritional behaviour lead to an increased fruit and vegetable intake. For their work, they explored the fruit and vegetable consumption among students, using a trial based on the social cognitive theory. They considered 138 students in Iran for their study. In addition, they state making students familiar with the fruit and vegetable taste is an important factor to influence their actual preference. As explained earlier, taste is understood as an element of the spectrum of Accessibility in this research (Seymour et al., 2004).

The work from Cullen et al. (2003) shows that a difference in understanding of the Accessibility of fruit and vegetables exists between parents and children. Their study includes 225 US children and their parents and explores the influence of Accessibility, Availability and preferences on the actual behaviour to consume fruit and vegetables. They found that Accessibility of fruit and vegetables is relevant for the parents only. The children report the need of Availability. Cullen et al. (2003) conclude therefore that parents need to make the effort to increase the Accessibility of fruit and vegetables and to make sure the children know of it. In their understanding, Accessibility means that fruit and vegetables are available at a place and in a form that simplifies the consumption. This includes that fruit and vegetables are cut into pieces or at locations which are easy to access. They state that children are more likely to consume available and accessible fruits.

Other aspects to consider in terms of Accessibility of fruit and vegetables are the right portion size, the preparation and the cooking (Donkin et al., 1998). This is supported by the work of Risica et al. (2017). They found that white-collar employees need access to refrigeration to store their fruit and vegetables. They further found that employees ask for recipes and techniques to prepare fruit and vegetables. These perspectives link Accessibility with the intention to consume fruit and vegetables. The intention towards fruit and vegetables impacts the actual consuming behaviour, as Menozzi and Mora (2012) found in their work. They applied the Theory of Planned Behaviour to the fruit and vegetable consumption of young adults in Italy. They concluded in their work that interventions aiming to increase the actual fruit and vegetables intake should develop the ability to overcome barriers to consuming fruit and vegetables. Such a barrier might be the need to prepare or cook fruit and vegetables. This research takes such elements into consideration, as at work, Accessibility includes the canteen, places where employees have the opportunity to prepare fruit and vegetables and the quality of the given circumstances to do so.

The work of Lacaille et al. (2011, p. 531) aims "to identify factors that college students perceived as contributing to healthy and unhealthy eating patterns". They consider the costs of fruit and vegetables as a relevant characteristic within their discussion on the consumption of fruit and vegetables. They also see the preparation of fruit and vegetables as a factor under environmental characteristics. Their study concludes that eating behaviours are a complex interplay of multiple elements such as "motivations and self-regulatory skills as well as the unique social and physical environment" (LaCaille et al., 2011, p. 537).

Definition Accessibility: In the understanding of this research, Accessibility means that the right and affordable fruit and vegetable for each individual employee is accessible at the right time, with the right quality and appropriately prepared for consumption. This includes having appropriate equipment accessible with which to prepare or consume the fruit and vegetables as well as a place where fruit and vegetables are prepared.

This definition goes back to the definition used by Story et al. (2008), who explored the food and eating environments at the home, the school or the workplace. They understand Accessibility as "whether available foods are in a form or location that facilitates their consumption, such as fruit on the counter" (Story et al. 2008, p. 255). This viewpoint is supported by the work of Davis Hearn et al. (1998), who defined the term Accessibility as the situation where food is prepared, presented or maintained in a way encouraging its consumption. In their work, the environmental

influences on dietary behaviour of children are explored. They hypothesised that a greater Accessibility leads to a higher intake of fruit and vegetables and found that such a relationship exists.

Hypothesis 2: White-collar employees' fruit and vegetable intake is affected positively by Accessibility.

2.5.3 Workplace Design

There are different meanings available in the academic literature defining the Workplace Design. The broadest report is published by the WHO and deals with a common and generally healthy Workplace Design in office locations, considering elements such as mental health and physical safety (Burton, 2010). The WHO report understands the Workplace Design as the physical work environment and defines it as "the part of the workplace facility that can be detected by human or electronic senses, including the structure, air, machines, furniture, products, chemicals, materials and processes that are present or that occur in the workplace, and which can affect the physical or mental safety, health and well-being of workers. If the worker performs his or her tasks outdoors or in a vehicle, then that location is the physical work environment" (Burton 2010, p.84). The WHO describes further the personal health resources in the workplace as a second avenue of influence on the employee workplace, which is co-related to the Workplace Design. "Personal Health Resources in the workplace means the supportive environment, health services, information, resources, opportunities and flexibility an enterprise provides to workers to support or motivate their efforts to improve or maintain healthy personal lifestyle practices, as well as to monitor and support their ongoing physical and mental health" (Burton 2010, p.86). This includes the employer's need to "provide and subsidize healthy food choices in the cafeteria and vending machines" (Burton 2010, p.87).

The perspective of the WHO report is supported through two reports published by the German Federal Institute for Occupational Safety and Health. They describe the ergonomic workplace configuration, room and desktop space, fresh air and indoor climate, as well as noise as the most relevant elements of the workplace design (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, 2010; Deutsche Gesetzliche Unfallversicherung, 2015).

The report from Gilbert et al. (2015) points out that ergonomic standards are in the accountability of Workplace Design. Adequate ergonomic standards can reduce the risk of

physical injuries in the office. They state that in the past, the functional requirements were in the focus of the office design to support the actual work of the employee. Taking the "whole" person into consideration when designing the office was missed. They name various opportunities to design the workplace in today's time. Their proposed factors are grouped under the following headlines given as: user control over the workspace, elements of nature, natural light, noise distractions, postures and movement, ergonomic principles, reduce presence of harmful elements and sense of community. Along with noise protection, flexible workplaces and circadian lightning systems, Gilbert et al. (2015) suggest collaboration areas, clean air and water access, social places, adjustable tables or plants in the office. They further state that changes to the Workplace Design help organisations to reduce health costs, which is in line with this research's hypothesis.

A research study found correlations between the design of the workplace and the actual employee behaviour. Mendis (2016) found through a self-administrated structured questionnaire with a sample of 90 employees that a relation between Workplace Design and job performance exists. She considered workplace layout, ventilation, lighting, establishment of equipment and thermal comfort as variables influencing job performance. The lighting factor shows the strongest positive correlation. Organisations can implement for instance new seating arrangements, offer different lighting systems or install equipment which employees prefer in order to make a difference in the Workplace Design.

In a Ph.D. thesis, it was explored whether ergonomic workplaces impact the employee productivity in a way which allows a return-on-investment calculation for improvements in the ergonomic workplace setup. Different performance indicators are reviewed and evaluated for a manufacturing plant from Volkswagen. The result shows that the ergonomic workplace has a positive effect on the productivity (Neubert, 2013).

Another perspective is based on the notion of the "caring boss". In their work, Pescud et al. (2016) state that in organisations which show a strong responsibility towards their employees and their personal well-being, interventions aiming to increase the fruit and vegetable consumption were easier to implement and better accepted. Taking this understanding forward under the light of Workplace Design, the work from Vischer and Wifi (2017) shows useful insights. They state that employees need to feel that their health and well-being is not in danger while at work. In their work, they explore the quality of work life and discuss the effect of improvements in Workplace

Design and environmental features on the morale and productivity of workers. They found that the supportive Workplace Design has a positive effect on the employees' behaviour. This view is supported by the work of Rueff and Logomarsino (2016). They assessed interventions increasing the fruit and vegetable consumption among manufacturing workers. They considered environmental changes, such as a reduction in potential for exposure to occupational hazards, as a way to increase the fruit and vegetable consumption.

Only a few studies were found exploring the structural factors within and around an organisational workplace design impacting the employees' fruit and vegetables consumption. Sorensen, Linnan and Hunt (2004) name in their research the worksite neighbourhood and the surrounding environment as factors to be considered as an influencing element for healthy eating. These two factors are not directly related to Workplace Design but demonstrate that the environment has a relevant stake in fruit and vegetable consumption.

Definition Workplace Design: In the understanding of this research, Workplace Design means a modern, supportive, encouraging and ergonomically appropriate workplace. The quality of the Workplace Design indicates the actual occurrence of the Workplace Design in the workplace environment. This includes enough space for employees to move and handle activities, pleasant indoor climate, acceptable noise level and a design which is encouraging both overall and specifically in relation to fruit and vegetables.

Hypothesis 3: White-collar employees' fruit and vegetable intake is affected positively by the quality of Workplace Design.

2.5.4 Social Climate

The WHO (Burton, 2010) reports 9 psychosocial factors which represent a great risk to workers' health. One of these factors is described as "organizational culture and function", which means a "lack of support for problem-solving and personal development". The Social Climate is understood as an element of the organisational culture and is in this research considered as a set of characteristics that are relatively stable and influence the behaviours of employees at work (Flarey, 1993). The Social Climate is described as a "molar concept consisting of a conglomerate of attitudes, feelings and behaviours, which characterizes the life in the organization" (Ekvall and Ryhammar 1998, p. 126).

A way to look at the work-specific Social Climate in terms of fruit and vegetable consumption is seen in the conclusion presented in the work of Sorensen et al. (1999). They express that the surrounding climate has an important role in health behaviour and eating habits. Their study explores the increase of fruit and vegetable intake when support from co-worker and support from family members is included into the worksite intervention. They found that the fruit and vegetable consumption increase by 19%, when the family is included and by 7% when only the co-workers are included. The control group did not show any increase in consumption. The Social Climate of the individual, including co-workers, is mentioned in their conclusion as an important factor in shaping the healthy eating habit.

An Australian-based research from Hutchinson, Howlett and Wilson (2013) used an experiment to explore the capability to increase the employees' fruit consumption at work through peer work support. Peer support is understood as an element of the Social Climate. Their research confirms that peer support can impact the employees' fruit and vegetables consumption, for instance through leading examples or verbal reminders. Similar facts are confirmed through the research of Lake et al. (2016). They explore the dynamics of a free fruit intervention at work. Such interventions include the office relationship to food and the peer support towards food intakes. Their intervention indicates that social support in the office has a positive effect on the intake of fruit and vegetables.

Another perspective to consider in terms of Social Climate is presented in the work of Story et al. (2008, p. 266). They conclude that "individual behaviour change is difficult to achieve without addressing the context in which people make decisions". They considered different groups of people, such as employees or students. A common finding in their work is that the social environment has a significant relevance in creating healthy food and eating conditions. A Canada-based research from Krueger, Koot and Andres (2017) explores the reasons for a low fruit and vegetable consumption and concluded that the four strategies recommended by the WHO, including behavioural interventions, should be followed to increase fruit and vegetable consumption. In addition to this, Bogers et al. (2004) concluded in their work that people need to be made aware of their current fruit and vegetable consumption and that their perceived control requires improvements. Making people aware of an inappropriate fruit and vegetable intake and initiating change or pointing out the need to change the individual behaviour requires trust towards the person or group providing such feedback (Black and Wiliam, 1998). This type of relation between employees forms a Social Climate at work.

Ljungblad et al. (2014) support this view and explore the work conditions required to promote workplace health in a Swedish social-care-organization. Their study purpose is to explore the psychosocial work conditions in terms of Swedish employee health and sickness absence. It was found out that a supportive and comfortable Social Climate, which includes a supportive management style, is an important element for the employees in terms of workplace health promotion. The relevance of the organisational leadership is also discussed in the work from Tsai (2011). They found that the organisational culture is related to the behaviour of the organisation's leaders. They see this as based on the fact that employees must be able to rely on their leaders. They conclude that the leadership style in organisations is very important and it can affect the employees' behaviour and attitude. Such leadership style is, as shown in the work of Ljungblad et al. (2014), part of the Social Climate.

Ekvall and Ryhammar (1998) found that management ownership has an essential influence on the work climate due to elements such as motivation, life situation, work style or health consideration. Their work considers 130 Swedish teachers and identifies the impact of leadership style, as an element of the Social Climate, on the organisational outcome. Their finding is supported by a report from the WHO. In this report, the support from the management is stated as an element that encourages employee participation and trust in wellness programmes (Quintiliani et al., 2007). The commitment of the organisation's management traditionally has a high impact on the employees (Gill, 2003). The management behaviour, style and attitude are relevant aspects in forming the Social Climate in organisations. This is further supported by the work of Sorensen, Linnan and Hunt (2004). They identified management commitment, social norms and social context as elements to be considered in their worksite-based research reviewing initiatives to increase the fruit and vegetable consumption. The support from the manager or the supervisor generates a supportive leadership style allowing employers to promote employees' health within an organisation.

A supporting perspective on Social Climate is delivered in the work of Najimi and Ghaffari (2013). They found that parents' support of fruit and vegetable consumption increased fruit and vegetable intake of school children. This demonstrates that the social environment has an impact on fruit and vegetable consumption. The parents support at home might be equal to support from managers and co-workers at work (Hutchinson, Howlett and Wilson 2013; Najimi and Ghaffari 2013).

Definition Social Climate: In the understanding of this research, Social Climate means the interpersonal respect and relationship between employees across their hierarchy position within the organisation. It includes how employees feel about their given work, are managed during their tasks and how co-workers behave to each other. The grade of Social Climate indicates that work is important to the employees, and that managers and employees value and support each other as well as work together in an appropriate way. It also includes that employees and managers talk to and care about each other with respect to the intake of fruit and vegetables.

Hypothesis 4: White-collar employees' fruit and vegetable intake is affected positively by the grade of Social Climate.

2.5.5 Communication

Poor communication is mentioned in a WHO report as one out of nine psychosocial factors which represent a great risk to workers' health (Burton, 2010). Communication is seen in the academic literature as a core element of the employee management (Quirke, 2008). Employees recognise Communication as an influencing factor on their work and actual behaviour. It is a leadership competency developing the actual employee motivation and encouraging employees to learn from each other (Galer, Vriesendorp and Ellis 2005). A good Communication is a fundament for the Social Climate at work (Ljungblad et al., 2014). Communication shows a close relation to the previously presented elements of Social Climate.

The academic literature provides elements of specific Communication in a wider context than fruit and vegetables, like workplace health promotions (Ljungblad et al., 2014) or food environments (Asada et al., 2017). The Austria-based research from Nöhammer, Schusterschitz and Stummer (2010) found that the management of information is of key relevance in gaining an employee acceptance towards workplace health promotions. Such information is supposed to be given early, be very personal, be positive and motivating as well as use appropriate media. This work implies the relevance of ensuring a Communication style which allows the flow of information within an organisation.

Quirke (2008) outlines in his textbook that Communication can be separated into internal and external Communication. The external Communication shares company-related information with external partners such as customers, shareholders or government bureaus. The internal Communication is about the Communication between the organisation and its employees. It

includes how the organisation communicates and which information is shared. For this research exploring the workplace characteristics increasing the fruit and vegetable consumption in Germany's manufacturing industry, the internal Communication is of interest.

Another perspective taken into consideration in Communication is the split between general and specific Communication. General Communication focuses on general information, explanations or conditions. Specific Communication shares information on a specific topic including elements such as issues or educating content (Piette et al., 2003). In their work, Piette et al. (2003) explore these two routes of Communication in terms of diabetes self-care. They conclude that improving either one of these routes probably has the potential to improve self-management. For this research, the learning from their work is to take into consideration that both general and specific Communication exist in terms of a health-related topic such as fruit and vegetable intake.

This literature review shows that not all research studies show a positive relation between Communication and the intake of fruit and vegetables. In a Germany-based report (Deutscher Fruchthandelsverband, 2012), the acceptance and consumption of fruit and vegetables is presented. It is stated that a specific Communication on the benefits of fruit and vegetables does not support the acceptance or consumption. Most of the consumers are aware of the benefits of fruit and vegetables. A Communication in terms of fruit and vegetables may lead to a counterproductive situation, as such Communication is not absorbed. The employees do not listen to the Communication, as they feel negatively not behaving in a way which would be good for them. De Bruijn (2010) supports this view with his work discussing the fruit consumption of college students. This work found that traditional health Communication efforts might not be successful in achieving a change in fruit and vegetable consumption. The findings are based on the Theory of Planned Behaviour and it is argued that Communication does not transfer the beliefs of those people who have an insufficient fruit and vegetable consumption.

An Australia-based study from Kothe, Mullan and Butow (2012) stands in contrast to this. They designed a worksite-based intervention using email messages to increase the fruit and vegetable consumption of students. This study found that new facts about fruit and vegetables, communicated via email, could affect the actual consumption of young adults. The researchers used the Theory of Planned Behaviour to design the email messages and their findings are consistent with previous studies using the Theory of Planned Behaviour to predict fruit and vegetable consumption. This is supported by the work of Risica et al. (2017). With their work, a

multi-level intervention approach to the intake of fruit and vegetables at work is explored. With their questionnaire and a focus-group method, they found that simple and readable newsletters are advisable. The survey participants ask for easy-to-follow recipes as content for such newsletters. Blue-collar employees ask for nutritional information and an email teaser to guide people to a website with video content with cooking information. White-collar employees asked for electronical Communication material and a website which is bright, simple to navigate and shows links from the newsletter.

The work from Glanz and Hoelscher (2004) found that Communication is one of six intervention types which increase fruit and vegetable consumption. With their literature-based approach, they reviewed restaurant-based environmental, policy and pricing strategies. They found that advertisings, posters and other Communication media are useful in sharing information and motivating people to consume healthy foods.

The general Communication between employer and employee shall also be illuminated. In their work, Kang and Sung (2017) found that general information sharing has a positive impact on the employee engagement and thus point out that such Communication has positive effects. They conclude that symmetrical Communication is a key factor in the relation between employer and employee. They recommend a two-way Communication practice to ensure complete and fair information for the employees.

Definition Communication: In the understanding of this research, Communication means the internal communication between an employee and their employer. It includes the general communication about the business and the company but also the specific communication about fruit and vegetables. The level of Communication represents and indicates an appropriate amount of high-quality communication between employer and employee.

Hypothesis 5: White-collar employees' fruit and vegetable intake is affected positively by the level of Communication.

2.6 Brief Summary of this Chapter

The literature review showed that the workplace environment impacts employee morale, productivity and engagement. The workplace environment consists of different workplace

characteristics, which were grouped into psychosocial and physical factors. These factors were studied in detail during the literature review process.

This chapter presented the existing knowledge about the psychosocial and physical factors and derived the most promising workplace characteristics to explain the fruit and vegetable intake of white-collar employees. During the literature review process, it is recognised that researchers tend to take one or two factors into consideration when exploring the effect on employees' fruit and vegetable consumption. This research study considers multiple variables. The variables used are Availability, Accessibility, Workplace Design, Social Climate and Communication. Based on the research questions, a hypothesis is developed for each variable.

The variables were reviewed in the academic literature and multiple perspectives and information in terms of the variables were presented. For each variable, the understanding applied in this study is presented in form of a definition. These definitions are used in the discussion of this study to provide a contribution to practice.

In the next chapter, the research approach which is used to answer the research questions and to test the hypotheses of the variables is explained.

3 Research Approach

This chapter describes and explains the choices made regarding this research approach. The research gap and the related research questions are taken into consideration to select the appropriate research strategy and research design. The conditions and the setup of the survey are introduced under the light of the selected research strategy and design.

3.1 Research Strategy

3.1.1 Philosophy

The research strategy is structured to allow the collection of data which evaluates the previously defined workplace characteristics affecting the employees' fruit and vegetable consumption at work. Before the process of data collection is discussed, the research philosophy will be defined.

In this management research study, the philosophy of positivism is used as the fundamental worldview, compromising a position on ontology and epistemology. This approach follows the explanations by Saunders, Lewis and Thornhill (2009) that observations of a phenomena produce credible data and that the hypotheses are based on existing theory. The hypotheses introduced in this current research study are based on the structured literature review and existing academic knowledge, which is conform with the positivism philosophy. Saunders, Lewis and Thornhill (2009) refer further to Remenyi et al. (1998), stating that an observable reality is able to create law-like generalisations. Under the philosophy of positivism, the developed hypotheses are tested. The outcome is either a confirmation as a whole or as a part, or a rejection as a whole. The facts of the findings build the source of information to deduce academic and managerial implications.

This philosophical perspective comes with the need to carry out the research approach in a value-free way. This means that the researcher shall form the data collection method in a way which ensures an external position of the research (Saunders, Lewis and Thornhill, 2009).

The ontology is understood as being "concerned with the nature of the social world and what can be known about it" (Ritchie and Lewis 2003, p. 22). In this context, Neuman (2014, p. 94) states that "we see what exists and we can easily capture it to produce objective knowledge". The world-view is "external, objective and independent of social actors" (Saunders, Lewis and Thornhill, 2009, p. 119).

Ritchie and Lewis (2003, p. 6) state that "facts and values are distinct, thus making it possible to conduct objective enquiry". This research is conducted under this perspective, taking into consideration that the real world consists of facts and values, like preferences of workplace characteristics or different employee hierarchy positions. The actual management, for this research the workplace characteristics, is similar to other organisations (Saunders, Lewis and Thornhill, 2009).

This perspective is required for this research because the workplace characteristics required to affect the fruit and vegetable intake exist in organisations in the current real world. These are the facts and values explored. Neuman (2014, p. 94) states in this context that "What you see is what you get". Employees cannot interpret or construct the existing facts, such as the workplace characteristics, differently. This means that either a workplace characteristic exists or it does not. For example, the access to a cafeteria or the quality of food are existing factors for the employees in their organisation.

The positivism philosophy thus supports answering the second research question which aims to understand whether the workplace characteristics vary depending on the employee hierarchy position. The different employee hierarchy positions need consideration because organisational roles such as Administrative Staff or Senior Manager have different existing frame conditions in terms, for instance, of the salary or the time in the office (Shin, 2014; Kurschner, 2019). This supports the perspective which aims to explore the facts and values.

The epistemology is understood as being "concerned with the nature of knowledge and how it can be acquired" (Ritchie and Lewis, 2003, p. 23). Following the understanding of epistemology from Neuman (2014, p. 95) "we can produce knowledge and learn about reality by making careful observations of it". This perspective respects that an observable phenomenon exists in the German manufacturing industry for white-collar employees. The aim is to collect information allowing verification of the actual truth and to conclude based on objective knowledge. This approach assists in finding the facts and values of the real world through the process and setup of this study. The focus is to find out the "causality and law-like generalisations, reducing phenomena to simplest elements" (Saunders, Lewis and Thornhill, 2009, p. 119).

Approaching this research study by using quantitative data is understood as a positivism philosophy (Neuman, 2014). This view is seen as feasible for this research to explain the

workplace characteristics. This is justified through the consideration that an extended understanding and knowledge are created through this research. Building up on the work from Merrill et al. (2012), knowledge is produced in terms of which workplace characteristics are required to affect the employees' fruit and vegetable intake.

The positivism strategy allows the hypotheses to be tested by creating a cause-and-effect relationship and carefully analysing numbers. The variables defined as the workplace characteristics are related to the actual intake of fruit and vegetables at work by white-collar employees. It is expected that the findings will produce credible data and facts explaining the intake of fruit and vegetables. "These processes lead to an empirical test and confirmation of the laws of social life" (Neuman, 2014, p. 102). This real social real life exists in the organisations between employees and their different hierarchy positions. The purpose is to achieve explanations of the existing real world, which goes along with the purpose of this research of understanding the intake of fruit and vegetables.

The positivism perspective supports the view that existing knowledge is available and new knowledge is added to complete the whole picture. This is underlying in the literature review process. Knowledge about traditional labour management and Corporate Social Responsibility is available. This research adds information to get a better and more detailed perspective of the whole. To learn about the existing social real world and to enable people to control the real world is understood as the relevance of the social scientific knowledge. Empowering managers to create interventions in the workplace environment to increase fruit and vegetable intake is the actual control this research aims to find.

3.1.2 Methodology

Exploring the workplace characteristics which make a difference in the office in terms of the intake of fruit and vegetables is seen as a problem of the real world. The world is in a moving condition and requires an approach towards the truth (Olivier, 2010) in an objective manner (Neuman, 2014). This requires a highly structured data collection process, which is supported through the positivism philosophy set for this research (Saunders, Lewis and Thornhill, 2009).

This research study uses quantitative data as the main source of information to understand which workplace characteristics significantly affect the intake of fruit and vegetables of employees. With the quantitative data, the cause and effect between the pre-selected variables and the

intake of fruit and vegetables is explained. This investigation uses the defined workplace characteristics, which are based on existing academic literature, as the independent variables in the quantitative data approach. In addition, the quantitative data are used to understand any differences of significant workplace characteristics in terms of the employee hierarchy positions. To explain which workplace characteristics are significant, the quantitative data is used, which represents the subjective situations of different employees in terms of their actual consumption of fruit and vegetables at work and their experienced workplace characteristics (Saunders, Lewis and Thornhill, 2009).

Even with an intensive literature review, there might be other workplace characteristics for white-collar employees in the German manufacturing industry which are not taken forward as a variable or have not been identified (Saunders, Lewis and Thornhill, 2009). Instead of ignoring the fact that there might be additional information existing in the real world, this research aims to acquire a broad knowledge about the real world and the existing workplace characteristics. This research therefore considers additional qualitative data to produce managerial implications and recommendations for the real world. The qualitative data are used to understand whether employee groups exist which show common perspectives in terms of barriers or needs for consuming fruit and vegetables at work. As mentioned in the literature review, barriers may block employees from consuming fruit and vegetables. Exploring whether other new or additional workplace characteristics exist which need to be taken into consideration to affect the employee fruit and vegetable intake is important. To understand the employees' perspective of required workplace characteristics, it is necessary to emphasise words and meanings provided by the employees in scope and their organisational hierarchy position (Bryman and Bell, 2011). The qualitative data offer the opportunity to collect additional information on the workplace characteristics affecting the consumption of fruit and vegetables. This approach enriches this research and helps to produce knowledge about the reality (Neuman, 2014). Combining the qualitative and quantitative data allows an in-depth, more detailed and a complete understanding of the research defined problem in the sense of the implications and recommendations. The positivism philosophy allows the collection of facts and values through quantitative and qualitative data (Saunders, Lewis and Thornhill, 2009).

The quantitative and qualitative data are independently evaluated (Creswell and Clark, 2018). Considering these methodology, a questionnaire is seen as the applicable method to collect the necessary quantitative and qualitative data for the considered study. Saunders, Lewis and

Thornhill (2009) support this approach by saying that questionnaires tend to be used for studies collecting quantitative and qualitative data. In order to collect the data evaluating the actual fruit and vegetable consumption of employees at work and the currently existing workplace characteristics, the questionnaire should use a large sample size. The sample size is discussed in section 3.2.2 in detail. The applied sample size needs to allow a statistical test as well as to make statements on the generalisation of the results (Gray, 2004; Creswell and Clark, 2018). A questionnaire can be shared with different organisations at the same time (Gray, 2004) to collect a wide range of feedbacks and to build the basis for statements on the generalisation of the results. A questionnaire also supports the value-free requirements, ensuring the researcher has an observable position.

Following the elements of the research process described, as Gray (2004) expresses, the research methodology requires a fundamental decision before the data collection method is discussed. Gray (2004, p. 32) points out that explanatory studies have the "emphasis on discovering causal relationships between variables." Gray (2004) recommends an explanatory approach when it is necessary to determine the relations. Neuman (2014) describe the explanatory approach as focusing on the "why" in order to explain situations and to identify reasons. This approach is seen as useful for this research to understand how the workplace characteristics are related to the actual fruit and vegetable intake at work. It is expected that the findings will explain the intake of fruit and vegetables affected through the workplace characteristics.

Building on the described philosophical worldview within the ontology and the epistemology, the research follows a deductive approach to further explain and to understand in more detail the workplace characteristics in the real world of white-collar employees (Bryman and Bell, 2011). The aim is to understand and to "explain the causal relationship between variables" defined for this research as Availability, Accessibility, Workplace Design, Social Climate and Communication (Saunders, Lewis and Thornhill, 2009, p. 125). The deductive approach of this research builds on existing knowledge to create additional knowledge on the workplace characteristics affecting the employees' fruit and vegetable consumption at work. Such additional knowledge is seen as the understanding of which workplace characteristics affect the employees' actual fruit and vegetable consumption and any differences according to the employee hierarchy position. In other words, the deductive approach allows this research to test the hypotheses defined and to explain the existing real world, as an aspect of the organisational development, in a practical manner in terms of improving the workplace.

3.2 Research Design

3.2.1 Research Method

The method selected for this research is a self-administrated online questionnaire to collect quantitative and qualitative data required to explore the workplace characteristics affecting fruit and vegetable intake. A web-based approach makes it possible to share the questionnaire with a wide range of potential participants. It needs to be taken into consideration that there is a risk of losing control of who is answering the questionnaire, which will require consideration in the survey structure (Gray, 2004).

Creswell and Clark (2018) state that a questionnaire allows researcher to use open and closed questions. The questionnaire enables the researcher to separate the quantitative and qualitative data collection, as typically the two types of data do not depend on each other. This option is needed in this research. The quantitative data are collected through closed-ended questions. Such closed-ended questions allow participants to answer the questions on a scale. The qualitative data are collected through open-ended questions (Gray, 2004; Creswell and Clark, 2018). Creswell and Clark (2018) mention an example from Bryanton and Weeks (2014), who collected data using multiple-choice questions and open-ended questions for their study. This example supports the method selected for this research. This method allows the researcher to focus on the content and experiences the survey participants express in their answers.

The quantitative closed-ended questions primarily use a scale structure from “strongly agree” to “strongly disagree”, as Creswell and Clark (2018) recommend. This type of Likert-style rating scale uses a 5-point structure to collect the data on the workplace characteristics and the fruit and vegetable consumption from the questionnaire participants (Saunders, Lewis and Thornhill, 2009). A 5-point Likert-style scale bears the risk that participants tick the middle. This risk is accepted, as the advantage of avoiding that participants are forced to make a positive or negative decision is predominating. Forcing questionnaire participants to make a positive or negative decision is not seen as an appropriate approach for this research because of the introduced world view that the real world is different for everyone. To make a decision as to whether an argument is either positive or negative is not how the real world works (Ritchie and Lewis, 2003; Saunders, Lewis and Thornhill, 2009).

Some of the closed-ended questions use a multiple-choice question approach (Siniscalco and Auriat, 2005). In multiple-choice questions, the survey participant is given a number of questions

to choose from. This is similar to a Likert-style rating scale, but the difference is a that multiple-choice questions offer alternatives from which the participant can choose. The multiple-choice questions used aim to understand a frequency or importance scale as well as to be able to create categories, such as age or gender. Multiple-choice questions sometimes allow the respondent to give more than one answer to a question. The approach used for this research needs just one answer per question and therefore does not allow providing several answers for one multiple-choice question.

For the quantitative data as well as the additional qualitative insights collected for this research, the non-probabilistic sampling approach is used.

Saunders, Lewis and Thornhill (2009) explain that snowball sampling, as a form of the non-probability sampling strategy, is used when it is difficult to identify potential participants (cases) for the research. Snowball sampling means that contact is made with a single case in the target population and that this case is asked to identify further cases supporting the data collection process. Participants of the questionnaire are asked to continuously identify potential further cases within the target population of white-collar employees in the German manufacturing industry. Snowball sampling is seen as a valid approach for this research. This strategy is used as an organisation consists of many different individuals in different hierarchy positions, with different experiences influencing their actual behaviour and expectations (O'Neill, Beauvais and Scholl, 2001). This indicates the need to consider different organisations in different segments of the manufacturing industry in Germany in the sampling process, as well as different hierarchy positions, different age groups, different genders and groups with different educational status. With snowball sampling, a wide range of different organisations and individuals can be approached. Approaching those different organisations and individuals ensures that the sample snowballs. The initial contact to start the snowball sample process is therefore started not at one single point but at a wide range of starting points. This reduces the risk of only achieving a small sample size because single organisations or individuals stop the snowball sample approach.

For this strategy, it is necessary to recognise that the sample actually used might not be representative of the population. The limitation of the snowball sampling strategy is that little control of the sample cases approached exists. This limitation is accepted for this research when a large sample size is given. A large sample size bears the opportunity to balance out such limitation in terms of the little control existing in snowball sampling because a wide range of

individuals are considered (Saunders, Lewis and Thornhill, 2009; Creswell and Clark, 2018). The sample size is discussed in section 3.2.2 in detail. The individuals being part of the sample are expected to have different experiences and provide an appropriate level of insights. This means that in order to include different needs and expectations in terms of the workplace characteristics affecting the employees' actual fruit and vegetable consumption at work, a variety in the companies and individuals invited in the sampling process is needed. It is also required to ask for confirmation of the individual survey participant that he/she is part of the defined target group. An appropriate introduction to the survey helps individuals to decide whether they belong to the target group.

The other main issue with snowball sampling is to make initial contact and to get the sample snowballing. Overcoming this limitation requires an appropriate data collection process assuring the snowballing gets started and does not depend on one or two single starting cases. The data collection process is described in detail in chapter 3.3.4. The survey is going to be published openly online and shared on Facebook, LinkedIn and Xing. This implies, in theory, every individual of the sample frame has the same opportunity to access the online questionnaire. The sample frame are white-collar employees in the manufacturing industry. White-collar employees are individuals who typically work in front of a computer and have access to the internet (Lips-Wiersma, Wright and Dik, 2016; Castellacci and Viñas-Bardolet, 2019). The internet sampling approach assists in overcoming the limitations indicated. The questionnaire can be forwarded within teams or organisations or to friends who are in the target group.

Internet sampling has advantages and disadvantages to be considered (Quinlan et al., 2014). The advantage is the fast and simple access to a wider population. The disadvantage is that many online questionnaires are published frequently, so users might be very selective. This may mean that many companies and individuals need to be contacted to reach an appropriate sample size. Also, perhaps not every potential participant in the target population has access to the internet. The target population of this research are white-collar employees, which means these are employees working in the office who most likely have access to a computer (Lips-Wiersma, Wright and Dik, 2016).

Additionally, companies operating in the German manufacturing industry as well as direct contacts of the researcher in the target population are invited to participate in the research. Not all of the potential participants are in the direct access of research. It is expected that most

companies will have a gatekeeper, who needs to be approached to invite its employer to the survey. The gatekeeper decides typically if the survey will be shared within the company (Creswell and Clark, 2018).

3.2.2 Sample Size

The targeted sample size depends in a first step on the research strategy applied. The questionnaire used for the survey consists of two areas. In the first area, the aim is to collect quantitative data through a range of predefined answers (multiple-choice) from which the survey participants can choose (Saunders, Lewis and Thornhill, 2009). The predefined answers are based on the literature review process presented earlier in this work and therefore on the existing academic knowledge. In the second area, the aim is to collect qualitative data through asking open-ended questions in order to explore in more detail missing information which might be relevant to the exploration of the workplace characteristics. With this second area, it is ensured that the predefined questions do not miss relevant information which the employees may require in order to be affected in their fruit and vegetable intake at work (Creswell and Clark, 2018).

In order to combine the deductive study design with potential additional insights to produce further implications and recommendations with regard to the workplace characteristics, the qualitative data are seen as requiring to be collected from the same individuals as the quantitative data. Asking different individuals contains the risk that data is collected which has already been covered through the quantitative data collection process of this research's survey. Closing the gap between existing academic knowledge, which has been used for the quantitative area of the survey, and unexplored barriers and needs of employees in the workplace is seen as the benefit of asking the same individuals for quantitative and qualitative data (Creswell and Clark, 2018).

The quantitative and qualitative data collected are from the same individuals but the number of individuals providing quantitative and qualitative date might be different. The quantitative section is mandatory for participants in order to complete the survey. The qualitative section is voluntary. This contains the risk of collecting a lower number of qualitative data through the survey process. This approach is chosen in order to avoid losing survey participants because of a survey which is too long and then working with a high number of missing data. The positivism approach of this research suggests concentrating on quantitative data. The limitation in terms of qualitative data is therefore accepted in this research.

A critical perspective of using a non-mandatory approach for the qualitative data is that the quality of the qualitative data is limited (Creswell and Clark, 2018). For this research, this risk is not seen as relevant. The collected qualitative data are required to find out whether there are employee barriers or needs which are not considered through the preselected workplace characteristics affecting the fruit and vegetable intake. Open-ended and voluntary questions support that survey participants report relevant barriers or needs. This approach avoids that survey participants are forced to report something to close the question, even if it is not a real barrier or need.

Creswell and Clark (2018) express that a rigorous quantitative study would require quite a large sample size. As a rule of thumb, Creswell and Clark (2018) mention N=350 participants for a population survey as an appropriate large sample. This number shall be strong enough to justify the research outcome and to argue the generalisation of the findings. Voorhis and Morgan (2007) support this, stating that a sample size of N=300 participants is seen as good, N=500 as very good and N=1000 as excellent. Following these two rules of thumb, achieving a sample size of N=400 is seen as strong enough for this positivism-based research.

This is supported through existing research studies within a similar context. Thompson et al. (2002) assessed the fruit and vegetable intake of 202 men and 260 women aged between 20 and 70 in the US. Their total sample size was 462, which goes along with the previously described rules of thumbs. They executed a telephone-administered survey. Another research, which was concerned with the psychosocial factors influencing the fruit and vegetable consumption, studied 405 US adults. The survey was executed using the telephone (Laforge, Greene and Prochaska, 1994). Their sample size was also in the range of the presented rules of thumb.

There are other research studies discussing the fruit and vegetable consumption of adults and children with a sample sizes of N=747, N=692 and N=538 (Watters, Satia and Galanko, 2007; de Bruijn, 2010; Menozzi and Mora, 2012). There are also research studies in the same study environment using a sample size of N=93 or N=157 (Jackson et al., 2005; Heim, Stang and Ireland, 2009). The adequate response rate is also a critical section in defining the appropriate sample size. Nulty (2008) recommends aiming for the highest response rate possible. For example shows Nulty (2008) for a class size of 2,000 students a required response rate of 25%, which is 509 students under the conditions of a 3% sampling error and 95% confidence level.

3.2.3 Measures

This research uses a multiple regression analysis to evaluate the quantitative data collected. This analysis allows the description of the relationship between a set of independent variables, which in this current study are the defined workplace characteristics, and the dependent variable, which is the fruit and vegetable consumption of white-collar employees (Pallant, 2016).

To ensure validity in the sense of assuring that the data measures what is supposed to be measured, it is necessary to make sure that the quantitative questions of the questionnaire are understood simultaneously by the survey participants (Bryman and Bell, 2011). Following the recommendations from Neuman (2014), a scientifically appropriate design of the research data collection process is required. In the work from Risica et al. (2017), external validity is justified by a random sample process across the entire worksite and not focusing on specific employees. In their work, interventions at the worksite are evaluated to increase the consumption of fruit and vegetables. In this current research, a large sample size is generated with a maximum N=374 for the quantitative data set. The survey completion is discussed in detail in section 3.3.6. Similar to the argument Risica et al. (2017) provided to confirm external validity, this current research also does not focus on specific employees or companies. The internet sampling process allows a wide and varied range of white-collar employees to participate. In total, 452 participants started the survey. Considering N=374 for the quantitative data as completed questionnaires, this is a completion rate of 82.74%. In the work from Bandoni, Sarno and Jaime (2010) exploring the impact of interventions on the consumption of fruit and vegetables, the rate of intervention acceptance is reported as 40%. Bandoni, Sarno and Jaime (2010) claim external validity, as they consider this level of acceptance as satisfactory. The low withdrawal rate in the current study implies a strong level of satisfactory as well. The distribution of white-collar employees along their education level and their employee hierarchy position is also seen as typical for white-collar employees (Leclerc et al., 1992; Lips-Wiersma, Wright and Dik, 2016). The overview of the employee distribution is discussed in detail in section 3.3.6. This supports the validity of the quantitative data collected.

To ensure reliability in the sense of ensuring that the results can be reproduced under the same conditions, the consistency of the data is required and therefore checked (Bryman and Bell, 2011). Following the recommendations from Neuman (2014) using pilot surveys can improve the reliability of a survey. Before the actual survey is executed, a pilot survey is undertaken. The pilot survey participants are asked to check if the questions asked in the survey are unclear or could

be misinterpreted. The pilot survey is discussed in detail in 3.3.3. The reliability of this research is further supported by the work from Karasek et al. (1998) using the Job Content Questionnaire to assess job characteristics. As the questionnaire used in this actual thesis is based on the Job Content Questionnaire, the statement from Karasek et al. (1998, p. 332) that they did not find "compelling reasons to reject the JCQ scales on the basis of inconsistency of means and standard deviations or Cronbach alpha reliability" supports the assumption of reliability for the scales used in this current research. Both arguments are supported through the Cronbach alpha coefficients reported for this current study. According to the work from Menozzi, Sogari and Mora (2015) titled "Explaining vegetable consumption among young adults: An application of the theory of planned behaviour", the Theory of Planned Behaviour has good internal consistency, with a Cronbach alpha coefficients reported between .49 to .89. Menozzi, Sogari and Mora (2015) accept lower coefficients as for the relevant items, examples in the literature are given accepting the lower levels. In this current study, the Cronbach alpha coefficient was between .736 and .827 for the internal reliability of the independent variables. Similar Cronbach alpha coefficient are found in the work from Bernales-Korins et al. (2017) reporting values between .75 and .87 for internal reliability. Their work explores the psychosocial influence on fruit and vegetable intake. It is a comparable area of research to this current study.

The work from Karasek et al. (1998) using the Job Content Questionnaire also points out the need to consider common method variance. The study from Bell (2019) illustrates how to deal with such common method variance and bias in business and management research. For a quantitative study testing a hypothesis, it is recommended to consider different ways of reducing the risk and impact through errors in the study. Following the recommendations from Bell (2019), in this current study, the questions for the dependent variable use a mix of question types (Likert-style and Multiple-choice), as explained in more detail in section 3.3.2.1. This "can reduce the potential for common method variance, as respondents' cognition towards previous answers is reduced" (Bell, 2019, p. 6). The independent variables use Likert-style questions only. The questions for independent variables are grouped per independent variable Availability, Accessibility, Workplace Design, Social Climate and Communication. This allows survey participants to think about each question or group of questions individually. In addition, the scales used change within the group of questions between Agree/Disagree, High/Low and Good/Poor. This reduces the risk of systematically answering. Bell (2019, p. 6) states further that the "question wording can also reduce the presence of common method variance". As mentioned earlier, the pilot survey discussed in detail in 3.3.3 asked the pilot participants to report any

unclear wording or wording which can be interpreted differently. This approach ensures that the questionnaire for the current study is arranged in such a way as to reduce bias in the study. Using the same source for the variables requires careful development of the questionnaire. For this research, using one questionnaire was the best option allowing the linking of the actual fruit and vegetable intake of white-collar employees with their workplace characteristics (Bell, 2019). A similar decision was made for the study from Lund et al. (2006) looking at physical work environment risk factors for long-term sickness absence and Conner, Norman and Bell (2002), applying the theory of planned behaviour to understand healthy eating.

3.3 Survey

In this research, the term survey is used as an umbrella in the data collection. The survey is made available to participants through an online webpage and can be accessed through a link to this webpage. The survey has a clear structure allowing every participant, independently of the sampling route, to have the same information available on the purpose and conditions of this survey.

3.3.1 Structure

The structure of the survey guides the survey participant using a standard survey layout provided by the survey service provider umfrageonline.com. From a survey execution point of view, the participants are passed on from stage to stage by clicking buttons on the webpage. This supports the split of the survey into three parts.

Part 1 is an overall introduction to the research and its objectives. The introduction includes the information sheet and consent form (see survey in Appendix 2.1 for the survey in German and Appendix 2.2 for the survey in English). The information sheet points out that the research focuses on white-collar employees. These are employees who spend most of their time executing non-manual labour, for example, people in finance, sales, front desk or leadership roles (Lips-Wiersma, Wright and Dik, 2016). The information sheet explains the benefits of participating, the risks, and how the data are managed. The estimated time needed to complete the survey is provided in order to allow participants an appropriate time management. The opportunity is given to the participant to exit the survey at any time. The research administrator contact details are provided in case there are questions or concerns, for example in terms of data protection, voluntariness or risks. A contact is also provided to the University of Worcester if a participant feels contacting the research administrator is not appropriate. Before participants are able to

enter the questionnaire and start providing their answers, each survey participant must confirm his or her job is based in Germany, a white-collar job is executed, and that the employer is operating in the manufacturing industry. This required consent of the participant avoids having participants answering the questionnaire who are not in scope of this research and losing control of the data collected. This is the major concern indicated by Gray (2004) in terms of using an online web-based questionnaire.

Part 2 of the survey represents the main element of the survey, the online questionnaire. This section contains the questions, a prize draw and an area where participants can request a download link to an executive summary or the full approved thesis. The questionnaire consists of a brief guideline introduction followed by 4 sections collecting the data. The first section aims to understand the participants and his/her job. These data are used to understand the hierarchy of the survey participant within the organisation that he/she is working for as well as age and gender. The second section discovers the fruit and vegetable consumption pattern of the participant. The third section explores the participants' existing workplace characteristics. These three sections apply a quantitative-based approach. The last section asks for additional qualitative insights to explore the employee-specific requirements in the workplace. The aim of this is to collect further information on the actual fruit and vegetable consumption at work. This section shall allow survey participants to express any items or information which are not covered by the preselected workplace characteristics.

Part 3 of the survey is the debrief providing some more background information to the participants in order to explain in more detail the purpose of the survey. This includes for instance identifying opportunities for a workplace transformation from which the employee may benefit. The debrief includes two useful links, if participants aim to learn more about the consumption of fruit and vegetables. This is on the one hand a link to the German "Bundeszentrum für Ernährung" (federal centre for nutrition) and on the other hand to the "Deutsche Gesellschaft für Ernährung" (German Nutrition Society). Both are organisations which support people aiming to achieve a healthy eating behaviour. The "Bundeszentrum für Ernährung" is a government founded organisation, while the "Deutsche Gesellschaft für Ernährung" is a non-profit NGO. This should enable participants with any healthy eating or wellbeing concern to access valuable support.

3.3.2 Questionnaire

The data required for the explanation of the workplace characteristics is collected through a self-report online questionnaire. The questionnaire is the 2nd part of the survey and consists of 4 sections to understand the survey participant, the actual fruit and vegetable intake, the workplace characteristics existing and requirements in the workplace. The questionnaire approach and design follows suggestions by Gray (2004) and Bryman and Bell (2011). Their recommendations include a clear presentation style of the questions, to not cramp the presentation, and to use horizontal questions for the Likert-style scale-based questions and vertical questions for the multiple-choice based questions. Saunders, Lewis and Thornhill (2009) recommend for the design of open-ended questions to avoid leaving too much space for the answers as well as that the question's wording must be precise.

3.3.2.1 Question Types

The questionnaire used in this research study consists of 60 questions collecting the quantitative and qualitative data required to explore the workplace characteristics affecting the actual fruit and vegetable intake.

As explained in the Research Method, the survey uses closed-ended and open-ended questions. The closed-ended questions are asked by using a 5-point Likert-style scale and a multiple-choice approach. In the following Table 1, an overview of the question types used and the number of questions is shown.

Table 1

Overview of types of questions used in the survey

Data	Question Type	Number of questions
Quantitative Data	5-point Likert-style	45
	Multiple-Choice	8
Qualitative Data	Open-ended	7

Table 1 - Types of Questions

The majority of the questions use the 5-point Likert-style scale approach with categorical data. This approach is used in the 1st, 2nd and 3rd section of the questionnaire. The 3rd section collects

the data needed to understand quantitatively the selected existing workplace characteristics. The multiple-choice approach is used for 8 questions in the 1st and 2nd section of the questionnaire only. In the 4th section, the open-ended questions are asked with an area for free writing allowing the respondent to enter a text (Siniscalco and Auriat, 2005).

In Appendix 2, the original questionnaire is shown. In the following Table 2, the overview of the questions used to determine the output variables for the quantitative data evaluation is presented. The table also shows the question type used to collect the data. It should be pointed out that multiple-choice questions are only needed to identify the actual fruit and vegetable consumption.

Table 2

Overview of questions used to calculate the output variables in the data evaluation

	F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Question Nr.	12 - 17	18 - 22	23 - 29	30 - 36	37 - 46	47- 53
5-point Likert-Style	X	X	X	X	X	X
Multiple-Choice	X					

Table 2 - Variable Calculation

3.3.2.2 Questions

The questions asked and the order of the questions is based on the questionnaires used in the work of Menozzi and Mora (2012) and in the work of Sorensen et al. (2009). The questions used are also inspired by other previous research studies, such as McKnight, Phillips and Hardgrave (2009), who explored if workplace characteristics or job characteristics have the potential to reduce the turnover intention of IT personal and Watters, Satia and Galanko (2007), who evaluated interventions aiming to increase the intake of fruit and vegetables. A further important source for the structure and the questions asked is the work from Karasek et al. (1998). They use the Job Content Questionnaire to assess job characteristics. In their work, psychosocial and physical elements are considered and it is therefore seen as an appropriate source for this work.

The questions 1 - 11 are used for selective insights on the kind of survey participants. Question 1 is needed to understand the age and question 2 the gender of the survey participant. Knowing the age and the gender of the survey participants is important in this research for the evaluation of the qualitative data aiming to explore whether new or additional workplace characteristics should be taken into consideration. New or additional workplace characteristics may need to be verified if they depend on a specific group of employees. Other research studies have shown that age and gender are associated with the actual fruit and vegetable intake (Watters, Satia and Galanko, 2007). Question 3 asks where the survey participant works and question 4 aims to understand his/her travel frequency. Question 5 explores his/her education level. Question 6 and 7 explore the conditions of work breaks. Question 8 asks for the job role of the survey participants. This is needed to explore any differences in the workplace characteristics based on the employee hierarchy position. Question 9 and 10 aim to understand the meeting behaviour of the survey participant. Question 11 investigates whether the survey participant has access to a canteen. The information collected with the questions 1 - 11 is used in the discussion of the survey participants in chapter 3.3.6.

The questions 12 - 17 explore the details needed to determine the variable of the actual fruit and vegetable consumption. The questionnaire used by Menozzi and Mora (2012) to explore the fruit consumption of young adults in Italy uses some of these questions in a similar way. The questions used in the questionnaire of this research survey consider not only the pure amount of fruit and vegetables consumed but also influencing factors such as the frequency and confidence to eat more fruit and vegetables. These influencing factors are considered to strengthen the expression of the actual fruit and vegetable intake. Question 12 identifies the frequency of the participant's fruit and vegetable intake and question 13 the actual amount of fruit and vegetables consumed on average every day. Question 14 asks for the time of day of consumption. The questions 12, 13 and 14 use the multiple-choice approach. Using the Likert-style scale approach, question 15 aims to understand whether the taste of the fruit and vegetables is liked, question 16 explores the confidence level towards eating more fruit and vegetables and question 17 asks for the time available to eat fruit and vegetables.

The questions 18 - 22 explore the details of the workplace characteristic defined as Availability. Understanding Availability as the fact that fruit and vegetables are present at work (see definition 2.5.1), the questions asked focus on where and how fruit and vegetables are present in the office. It is seen as important that the variable Availability considers different locations as well as

whether the food offered takes into consideration that different people may like different food and therefore a product variety is needed. Question 18 asks for the acceptance of the canteen and question 19 for the quality of fruit and vegetables provided. Question 20 explores whether fruit and vegetables are offered in meetings as an alternative location to present these. Question 21 asks further if fruit and vegetables are available at different locations to factor in whether a broad availability is given. Question 22 asks for the variety of fruit and vegetables present.

The questions 23 - 29 explore the details for the workplace characteristic defined as Accessibility. In this research, Accessibility is understood as the fact that fruit and vegetables are accessible in an affordable and consumable way (see definition 2.5.2). The questions used to construct this variable include the possibility to prepare fruit and vegetables and thereby make them consumable for employees as well as whether an appropriate condition is given. Question 23 asks for the quality of the fruit and vegetables offered in the canteen. Question 24 explores locations where fruit and vegetables can be prepared and question 25 asks how well this location is equipped with tools. Question 26 and 27 explore the impact of such locations. Question 28 asks about the range of fruit and vegetables offered. Question 29 explores whether costs of fruit and vegetables are a barrier.

The questions 30 - 36 explore the details of the workplace characteristic defined as Workplace Design (see definition 2.5.3). Understanding the Workplace Design as the surroundings of the employees' workplace, workspace or office, the questions asked in the questionnaire consider how the work environment looks, is created and how employees are impacted by working in such an environment. Question 30 explores how the workplace is equipped and question 31 asks for the ergonomic situation of the office equipment. Question 32 asks about the space given to work. Question 33 explores the room climate and question 34 asks for the noise level. Question 35 and 36 ask how the fruit and vegetable consumption is affected through the workplace design.

The questions 37 - 46 explore the details of the workplace characteristic defined as Social Climate (see definition 2.5.4). Galer, Vriesendorp and Ellis (2005) applied in their studies the work climate assessment, which was developed by Management Sciences for Health Management and Leadership programme. This assessment is used to create the questions to evaluate the social work climate. Question 37 asks for the job importance and question 38 asks about the work outcome. Question 39, question 40 and question 41 explore how the management interacts with the employees and forms the environment. Question 42 investigates the teamwork. Question 43

asks to evaluate the conditions for a healthy food behaviour. Question 44 asks whether the employer is concerned about the actual fruit and vegetable intake. Question 45 explores whether colleagues are concerned about the health of others. Question 46 asks whether colleagues talk about fruit and vegetables.

The questions 47 - 53 explore the details of the workplace characteristic defined as Communication. Internal Communication may focus on general company information or topic-specific information about fruit and vegetables (see definition 2.5.5). The questions asked focus on both elements and factor in the quality of the provided information and the actual employee satisfaction about the information. Question 47 asks if general information is shared and question 48 explores the quality of such information. Question 49 asks for the actual employee satisfaction achieved through such information. The same questions are asked with a focus on fruit and vegetables specifically. Question 50 asks whether information about fruit and vegetables is shared, question 51 asks whether the advantages of fruit and vegetable consumption are communicated and question 52 explores the quality of such Communication. Question 53 asks for the actual employee satisfaction achieved through such information.

The questions 54 - 60 are open-ended questions to collect additional qualitative data. These questions are structured to explore barriers, existing conditions, recommendations and any other needs in relation to the consumption of fruit and vegetables. This structure shall allow the participant of the questionnaire to provide a wide range of information and does not "restrict their options for responding" (Creswell and Clark 2018, p. 179). Questions 54, 55 and 56 explore the barriers in the workplace, the workspace and the office. Question 57 asks for existing conditions supporting the survey participant today in the intake of fruit and vegetables. Question 58 and 59 allow the respondent to provide recommendations to increase fruit and vegetable intake. Question 60 finishes the questionnaire asking for any other help needed in terms of the consumption of fruit and vegetables. This structure covers the perspectives "what is good" and "what can be done better" from an employee perspective on the workplace characteristics. It is therewith assumed that a wide range of information can be collected with such open-ended questions.

3.3.3 Pilot Survey

A pilot survey is used to reduce the risk of issues during the execution phase. This includes testing the flow of the survey and asking for feedback on the explanations, survey size as well as

any other relevant aspects to ensure the actual survey is appropriate (Slattery et al., 2011; Fowler, 2014).

The pilot survey was an exact duplicate of the survey created. It was sent out to 16 participants. In order to separate the pilot survey from the real survey, the pilot survey was named "TESTUMFRAGE: Der Konsum von Obst und Gemüse in Deutschlands produzierendem Gewerbe" (in English: "TEST SURVEY: the consumption of fruit and vegetables in Germany's manufacturing industry"). As expressed earlier, the survey and the pilot survey were executed in the German language. The link to the pilot survey was sent out via email on 03/02/2019 and 06/02/2019. Before the email was sent out, each participant was consulted and asked for confirmation to participate in the pilot survey. Each participant was informed that the outcome of the pilot survey would not be used in any further evaluation process, as well as that the pilot survey would be deleted. Each participant was asked to provide an email address to be used for the pilot survey and the email was sent out as blind-copy to ensure data protection of each participant's email address. It was pointed out to the participants that the support is voluntary, and that the prize-draw does not apply.

The chosen participants were not in the described target group of the survey. This decision was made in order to avoid participants being approached twice. As the survey were distributed through social media channels, there was a risk that the participants of the pilot survey may receive the link to the real survey as well. As those participants of the pilot survey would answer the same question twice and already know the survey in detail, it was aimed to invite participants to the pilot survey who were not in the target group of the survey.

The pilot group are participants working in Germany and executing a white-collar job. The difference is made through selecting another industry. As the manufacturing industry is in the scope of this research, the pilot group focuses on employees who have a white-collar job in industries such as Financial Service and Banking, Retail, Education or Social Service. This is seen as a true pilot because of selecting white-collar employees. In the understanding of this research, there is no essential difference in the white-collar job of an employee in the manufacturing industry compared to, for example, the Financial Service. The definition of a white-collar job is that the majority of the time is spend in the office and it is for the pilot survey appropriate to ignore to which industry the office job is related. Selecting a different industry for the pilot survey also bears the advantage of assuring that the survey participants of the pilot survey do

not participate in the actual sample survey. Because of the snowball sampling approach and the limited control in terms of who is participating, this is of key relevance.

The participants of the pilot survey are asked to review the survey to provide feedback and recommendations for any aspect they are concerned about (Gray, 2004). In order to provide guidance to the participants, they were asked to consider in their feedback mistakes in grammar as well as typos, whether the questions are understandable and clear, whether 5 - 10 minutes to answer all questions is realistic and whether the structure of the survey is logical and comprehensible.

Out of the 16 invited participants, 11 participants started the survey, but 2 did not complete the survey. From the remaining 9 participants, 7 participants provided detailed written feedback, which leads to the assumption that for the 2 other participants the survey was acceptable as no feedback was provided. As these are only 2 participants, the impact on the feedback result is minor and does not affect the pilot survey outcome (Bryman and Bell, 2011; Creswell and Clark, 2018).

The feedback on the completed pilot surveys is grouped into six segments described as Grammar and Typos, General, Questions, Answers, Time and Structure. The segment “Grammar and Typos” includes all found mistakes in spelling or text order, for which 3 pilot survey participants provided feedback. In the segment “General”, 5 pilot survey participants recommended changes in the appearance or the flow of the survey. In “Questions” the feedback of 3 pilot survey participants is grouped. The segment “Answers” includes the feedback of 4 participants. The segments Questions and Answers include whether the question or the answer was understandable, the answer did not fit with the question or it was recommended to move the question to another place in the questionnaire. The segment “Time” is used for the feedback of 4 participants, who were not able to complete the survey in 5 - 10 minutes. The last segment, “Structure”, includes the feedback of 2 participants, which is related to the overall survey approach.

Some of the recommendations could not be applied due to technical boundaries set by the survey generator of umfrageonline.com. Such non-transferable recommendations did not have an impact on an appropriate execution of the survey. A relevant statement of one pilot participant was to provide more details on the research purpose at the beginning. The debrief provides this

information but is shown after the questionnaire. It was recommended to make some questions and answers clearer. The most common concern was given on the timeframe, as none of the pilot participants were able to complete the survey within 5 - 10 minutes. Most of the pilot participants stated that they needed 10 - 15 minutes to complete the survey. The provided time indication in the information sheet of the survey was accordingly updated to 10 - 15 minutes. The feedback grouped under "Structure" suggested considering offering a 6-scale answer instead of a 5-scale answer in order to avoid participants just clicking or choosing the middle. It was decided for this research to remain with a 5-point Likert-style scale ranging approach. This concept is used in the work of Cook, O'Leary and Allman-Farinelli (2015) investigating what helps adults in Australia to change their fruit and vegetable consumption.

It was recommended to hide questions which are related to a canteen if the survey participant answered earlier that his/her employer does not provide a canteen. This recommendation was followed in order to avoid confusion. Another critical recommendation was given on the wording in the open-ended qualitative questions. It was asked to provide insights on the psychosocial workplace characteristics, as this terminology is not easy to understand. An explanation is added to the survey expressing the meaning of the psychosocial workplace characteristics.

3.3.4 Data Collection Process

In order to invite employees of this research's target group to participate in the questionnaire, a predefined two-way sample route is used.

First, the survey was published on Facebook, LinkedIn and Xing. The post explained briefly the aimed benefits of the questionnaire to encourage people to participate and to use a snowball sampling approach (Saunders, Lewis and Thornhill, 2009). Selected direct contacts of the researcher, who work or used to work in a white-collar job within Germany's manufacturing industry, were contacted by email, instant-message or phone. They were asked to share the survey within their network, either through their social media accounts or via direct email. A search for people working in a white-collar job in the German manufacturing industry was also carried out on LinkedIn or Xing to increase the spread of the survey link. This approach may lead to a wide distribution of the link of the online survey. In addition, the survey was sent directly to 162 contacts of the researcher, either using social media or email. The social media post, as well as the note to the direct contacts, made clear that the participation is voluntary. To avoid coercion for pre-existing relationships, a maximum of 3 reminders within 6 weeks was set.

Second, the survey was shared with 150 preselected companies operating in Germany's manufacturing industry. Such companies were identified through a web-based research and contacted by email or phone. In Appendix 1.1, the survey letter inviting these companies is shown (Appendix 1.2 is the English version of the survey letter). The appropriate gatekeeper is contacted, with the assumption that the HR department has this role. The online questionnaire was publicly accessible through a link for anyone who received this link. This means that the link could be easily shared within a company or passed on from any contact.

Independently from the sampling route, the link shared took all potential participants to the same online survey. This was independent from the introduced two-way sampling routes. All potential participants accessed the same survey through the same link to the survey webpage. This was important to ensure that every participant had the same information about the survey given in the survey introduction.

The survey was distributed at a time when there are no major cultural impacts on employees' eating patterns in Germany, such as Ramadan. This avoided that the survey outcome is affected by such an event.

A compensation for the time and effort of completing the questionnaire was offered to the participants. Amazon vouchers of 50 euro will be given to 8 participants, who will be selected randomly. Other research studies, such as that of Menozzi and Mora (2012) exploring the fruit consumption determinates among young adults in Italy, demonstrated a high rate of participants using this method. In this study, 692 students completed the questionnaire out of 723 considered students. Menozzi and Mora (2012) offered a lottery with a prize of 50 euro for 8 participants.

3.3.5 Ethical Considerations

The research follows the ethical guidelines of the University of Worcester to ensure ethical rigor is given. Relevant legislation in Germany and required approval processes needed for the survey were examined. Neither the website of the German Psychological Society, the German Ethics Council, the Federal Ministry of Education and Research nor of the Parliament of the Federal Republic of Germany indicate any legislative hurdle or approval process required to undertake the research. Solely, it might be required in some organisations to consult the Workers' Council. This only applies when an organisational gatekeeper is approached in order to execute the survey within their company. Whether the Workers' Council must be consulted depends on the

organisation and their internal guidelines, way of working and cooperation with the Workers' Council in general. The letter to the gatekeeper (Appendix 1) asks whether additional information might be needed, for example for the Workers' Council, in order to ensure that this is considered by the gatekeeper. The organisational gatekeeper is by law in the legal responsibility to evaluate whether it is necessary to consult with the organisational Workers' Council. It is not seen as part of the researcher's responsibility to talk to the Workers' Council. The consultation of the Workers' Council does not apply to other sample routes.

Guidelines for internet-mediated research were reviewed. The paper called "Ethics Guidelines for Internet-mediated Research" from the British Psychological Society was read and compared to the general German Psychological Society ethical guidelines and their revision for research from 28/09/2004. The German Psychological Society ethical guidelines are a very specific paper for psychologists and their job execution. The ethics revision from the German Psychological Society and the ethics guidelines from the British Psychological Society are both similar research guidelines to the University of Worcester's ethical guidelines. There was no additional need to amend the research data collecting process.

The survey is pre-created in MS-Word and transferred into the online platform from the service provider "umfrageonline.com". This service provider is used for this research because of the statement that the General Data Protection Regulation (GDPR) of the European Union is followed, an anonymous survey function is offered, and the survey's participant IP address is not saved. At this stage, it should be mentioned that the survey as well as the pilot survey are both published in the German language in order to avoid missing data or a low response rate. The target group of this research are employees working in Germany. This approach is recommended by Bryman and Bell (2011).

The participants are not asked for their name or their employer's company name. This ensures anonymised survey data. Before the survey participants can access the questionnaire in part 2 of the survey, they are asked to confirm that the conditions for participating in the survey are understood and accepted (informed consent). Such conditions include that the participation is voluntary, the individual is working in the German manufacturing industry and has a white-collar job. In addition, any survey participant is given the right to withdraw from the survey at any time (see survey in Appendix 2). The collected data are managed confidentially in order to

ensure an appropriate data protection. Data access might be given to the Director of the Study for supervision purposes.

The quantitative data of the research are expressed statistically through means, totals, ranges or similar. As those statistics are based on the full collected data and not on single individuals, the anonymity of the participants' data is given. The qualitative data expressed is separated from any the survey participant-related information. Data is grouped and reported in numbers where possible to support the separation of participant and data.

3.3.6 Survey Completion

The online questionnaire used for the study was accessed by 452 participants. A rule of thumb provided by Creswell and Clark (2018) recommends 350 participants for a population survey. The quantity of 452 collected data points seems to be appropriate for executing the data evaluation process. This research meets the statistical power requirements of the study and provides an appropriate supply of narrative data. The survey is split into a quantitative and qualitative section. The maximum N is 374 for a single workplace characteristic because of uncompleted surveys.

Table *3*

Overview of actual sample size for quantitative data

	Access of Survey	Started Questionnaire	Completed Quantitative Section
No. Survey Participants	452	401	374

Table 3 - Actual Sample Size for Quantitative Data

In addition to the quantitative data collected, the questionnaire aimed to collect qualitative data. The related section of the questionnaire was completed by 170 to 276 participants, depending on the question asked.

In total, 78 participants started the survey but did not complete it. Such participants stopped at different stages within the survey. Such missing cases are excluded pairwise in the survey evolution processes. To excluded cases, pairwise is chosen in order to use the majority of the data available for the evaluation. The data provided from participants with missing data are

“included in any of the analyses for which they have the necessary information” (Pallant 2016, p. 58).

The majority of the survey participants are in the age group <30 with 184 participants. The next largest age group is between 31 and 40 years old, which is represented in this research through 117 participants. 53 participants are between 41 and 50 years old, while 47 participants are older than 50 years.

The most participants are female (237 participants), while only 164 males joined the questionnaire. The absolute most frequented workplace location is the employer’s office building. 379 survey participants stated working there. Just 12 survey participants work from home and 10 from somewhere else.

The largest group in terms of education holds a University degree or similar. 294 survey participants chose this group. 92 survey participants completed a vocational training. Just 9 participants completed secondary school level and 6 participants completed lower school level education.

The majority of survey participants (151) stated spending a medium volume of time in meetings. 103 survey participants say they spend little time in meetings and 33 say very little. On the contrary, 92 survey participants state spending much time in meetings and 21 state very much.

136 survey participants report a very low travel intensity for work, 107 a low travel intensity. A medium travel frequency is reported by 83 participants. Just 63 survey participants state that their travel intensity for work is high and 12 state that their travel intensity for work is very high.

The range and kind of survey participants is seen as appropriate and as meeting the requirements of Creswell and Clark (2018) and O’Neill, Beauvais and Scholl (2001) in terms of a large sample size introduced in chapter 3.2.2. The sample is seen as being representative for understanding the workplace characteristics’ effect on the intake of fruit and vegetables.

In the following Table 4, an overview of the survey participants is given. The majority of the survey participants hold a University degree or similar, which is typical for white-collar jobs and

the related socio-economic status (Leclerc et al., 1992; Lips-Wiersma, Wright and Dik, 2016). The data collected through this research are therefore representative of the white-collar job classes.

Table 4
Overview of white-collar job classes linked to the educational level of the survey participants of a total N=400

White-collar job class	Secondary school, or equal graduation N	Middle school, or equal graduation N	Completed apprenticeship, or equal N	University, or equal graduation N	Total N
Administrative Staff	3	3	52	58	116
Manager	2	1	14	125	142
Senior Manager	0	3	4	44	51
Executive Manager	0	0	2	19	21
Owner, Board Member, or Similar	0	0	2	9	11
Other White-Collar Jobs	0	2	18	39	59
TOTAL	5	9	92	294	400

Table 4 - Overview of Survey Participants

3.3.7 Margin of Error

The survey population are the employees of the manufacturing industry in Germany, which are in total 7,273,011 (Eurostat, 2018a). This includes white-collar employees as well as blue-collar employees. In 2017, the average rate of white-collar jobs in Germany was 66.3%, while for blue-collar jobs it was 18.1%. The rest are self-employed people or public officers (Institut Arbeit und Qualifikation der Universität Duisburg-Essen, 2018). Using this average white-collar job rate for the manufacturing industry forms a target population of $7{,}273{,}011 * 0.663 = 4{,}822{,}006$ employees in Germany.

The margin of error is a decent indication as to whether the sample size is large enough (Bryman and Bryman, 2007; Fowler, 2014; Creswell and Clark, 2018). The general formula for the margin of error is shown below.

$$z * \sqrt{p * (1 - p)} / \sqrt{(N - 1) * n/(N - n)}$$

The z-value represents the level of confidence that the data are correct, which is for this study the usual confidence interval for an individual population of 95% (Franklin, 2002). The n-value states the sample size of 452 participants who joined the survey, while N is the population size. The value p represents the proportion or the response distribution.

Fowler (2014) provides a table to deduce the margin of error (MOE). Assuming that 50% of the collected data are correct and 50% are incorrect as well as with a confidence rate of 95%, the MOE is 6 for a sample size of 300 data points and 4 for a sample size of 500 data points (Fowler, 2014). As the realised sample size is 452, the MOE must be between 4 and 6, while it is supposed to be closer to 4 than to 6. This means that the true figure for the data is between +/-4 and +/-6.

Using the introduced formula, the MOE for the sample size is given as below. The z value needs to be identified. The commonly used z-score is given by the desired confidence level of 95% at z= 1,96 (Sullivan, 2017). The value p, understood as the response distribution given for a large sample size, is given at a maximum of 0.5 (Franklin, 2002).

The target population is N = 4,822,006, based on the total employed population in Germany's manufacturing industry and the 2017 average rate of white-collar jobs (66.3%) in Germany. The achieved sample size is n = 452.

$$\text{MOE} = 1{,}96 * \sqrt{0.5 * (1 - 0.5)} / \sqrt{(4{,}822{,}006 - 1) * 452/(4{,}822{,}006 - 452)}$$

$$\text{MOE} = 0{,}98/21.261 * 100$$

$$\text{MoE} = 4.609\%$$

This result indicates with 95% confidence that the sample value will differ no more than 4.609% from the real population value.

3.4 Brief Summary of this Chapter

This chapter presented the research approach and explained the decisions made in terms of the research strategy and the research design. This research study followed a positivism philosophy. It collected quantitative and qualitative data through an online questionnaire. The quantitative data were collected with mandatory closed-ended questions and the qualitative data were collected with voluntary open-ended questions. In total, 60 questions were asked. The majority of questions were using a 5-point Likert-style scale for the quantitative data.

This chapter showed that a two-way sample route was used with a non-probabilistic sampling approach. The online questionnaire was published through different social media channels and was sent directly to white-collar employees and preselected companies operating in Germany's manufacturing industry. With this sample strategy, N=452 survey participants started the questionnaire and N=374 survey participants completed the quantitative data section, which is an appropriate size for the data evaluation. The data collected was verified as representative for white-collar employees.

In the next chapter, the data is evaluated to answer the research questions.

4 Data Evaluation

This chapter presents the collected data of this research (see Appendix 5). It is described and justified how data are manipulated and evaluated. It is explained how the data file in SPSS 25 is created and how the data are entered. As for the ethical approval, the required data for the analysis which were collected with the online survey were separated from the email addresses provided by the survey participants for either participating in the voucher draw or to receive a copy of the approved thesis. In a first step, the quantitative data are reviewed to explain the known workplace characteristics and the effect on the actual intake of fruit and vegetables. In a second step, the qualitative data are reviewed in order to explore new or additional workplace characteristics indicated by the survey participants as affecting the fruit and vegetable intake.

With the quantitative and qualitative data, the aim is to answer the research questions. The first research question aims to understand which workplace characteristics affect the employees' fruit and vegetables consumption at work. The second research question aims to answer whether there is a difference in terms of the employee hierarchy positions and the required workplace characteristics to increase the actual fruit and vegetable consumption at work. To answer such research questions, the quantitative data are used to test the hypothesis deduced from the literature review. The qualitative data are explored in detail to find out whether survey participants state barriers, hurdles or needs holding them back from the intake of fruit and vegetable. Such insights are used to understand whether there are new or additional workplace characteristics which need to be considered. The codebook for the data used is shown in the Appendix 4.

4.1 Analysing Known Workplace Characteristics

In the process of understanding the known workplace characteristics, the quantitative data are used. The data set, downloaded from the online questionnaire tool, is provided in an Excel spreadsheet. The data set is uploaded to SPSS 25 and the measure definitions (scale, ordinal and nominal) are given to the variables, after allocating the name, label and values. The value rankings are using as the highest score 1, defined as "fully agree" (or similar). The lowest score used is 5, defined as "fully disagree" (or similar).

The 6 scale output variables are the preselected workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication as well as F&V Intake,

which represents the actual consumption of fruit and vegetables of the white-collar employees investigated. Table 5 shows the number of used input variables to calculate the output variables.

Table 5

Overview of number of input variables per output variable

	Avail-ability	Access-ibility	Workplace Design	Social Climate	Commun-ication	F&V Intake
Number of Input Variables	5	7	7	10	7	6

Table 5 - Variable Calculation

The output variables are calculated with the mean of the input variable data collected through the questions in the survey. The analysis of the quantitative data is the primary source of information collected with the research survey. Such quantitative data are used to test the five hypotheses derived from the literature review for each of the variables identified as workplace characteristics.

Hypothesis 1: White-collar employees' fruit and vegetable intake is affected positively by Availability.

Hypothesis 2: White-collar employees' fruit and vegetable intake is affected positively by Accessibility.

Hypothesis 3: White-collar employees' fruit and vegetable intake is affected positively by the quality of Workplace Design.

Hypothesis 4: White-collar employees' fruit and vegetable intake is affected positively by the grade of Social Climate.

Hypothesis 5: White-collar employees' fruit and vegetable intake is affected positively by the level of Communication.

To test such hypotheses, it is necessary to manipulate the negative wording for the variables "Consumption" and "Day Time" (Pallant, 2016). In order to follow the logic of a highest value ranking, the lowest numeric number is given to the highest answering option. The value rankings for "Consumption" and "Day Time" are changed as shown in the Appendix 3.

In order to get the most insight to test these research hypotheses, the quantitative data collected through the online questionnaire are evaluated with the multiple regression analysis (Pallant, 2016). This method is used in order to explore the relationship between the fruit and vegetable intake of the survey participants and the identified workplace characteristics within the literature review (Pallant, 2016). The method allows the researcher to explore how well these variables are able to predict the outcome defined in the research as the fruit and vegetables consumption at work (Pallant, 2016).

The advantage of the multiple regression is seen in the "more sophisticated exploration of the interrelationship among" the variables defined, compared to the correlation between such variables (Pallant 2016, p. 149). Following the recommended instructions Pallant (2016) provides, it is necessary to enter the variables into the model simultaneously, which allows the evaluation of the variables Availability, Accessibility, Workplace Design, Social Climate and Communication in terms of their predictive strength in terms of fruit and vegetable consumption at work.

In order to ensure the quality of the regression analysis, the sample size needs to be strong enough. A formula gives as $N > 50 + 8 * m$, with "m" as the number of independent variables and "N" as the sample size. (Tabachnick and Fidell 2013, p. 123). This means that for this research, the sample size is supposed to be at a minimum of $50 + 8 * 5 = 90$ data points. As per the discussion earlier in chapter 3.3.6, the online survey collected in total data points form 452 participants. The minimum N identified is 374. This varies because of not completed surveys (see Appendix 10). According to the formula, this sample size is valid to apply the multiple regression analysis to explore the collected data in detail.

4.1.1 Checking Assumption for Correlation Analysis

The standard multiple regression analysis undertaken for the detailed evaluation of the data to be explored is based on correlation (Pallant, 2016).

The standard multiple regression analysis uses the F&V Intake at work as the dependent variable and explores the relationship to the 5 independent variables Availability, Accessibility, Workplace Design, Social Climate and Communication. The following Table 6 shows the descriptive statistics for the executed standard multiple regression with SPSS 25. The decreasing N-value shown is caused by the fact that some survey participants did not finish the survey.

Table 6

Overview of workplace characteristics identified in the online questionnaire, including the sample size achieved across all employee hierarchy positions

Workplace characteristics	Valid N	Cases Missing N	Total N	Response Rate
Availability	393	59	452	86.9%
Accessibility	384	68	452	84.9%
Workplace design	382	70	452	84.5%
Social Climate	379	73	452	83.8%
Communication	374	78	452	82.7%
F&V Intake	395	57	452	87.3%

Table 6 - Descriptive Statistics

In order to get the statistically highest benefit from the collected data, missing data are only excluded pairwise. This option "excludes the case (person) only if they are missing the data required for the specific analysis" (Pallant 2016, p. 58). This means that the data of the survey participants is included for those analyses for which they have provided the data. Using the pairwise exclusion of data is also sometimes called the available case analysis. This means that all available data to calculate statistical values of a variable are used. This maximises the value of the collected data if survey participants do not complete the full questionnaire. The pairwise exclusion also allows the researcher to use the data collected from survey participants for the statistical calculations they have provided information for. A disadvantage of this approach is that varying response rates occur, as indicated in Table 6. The subsets calculated based on the same sample lead to different statistical outcomes due to the exclusion of data. This is a disadvantage to be accepted for this survey as the total of N=452 is a larger sample size and the variance between the response rates is quite small (Switzer and Roth, 2004).

The need to ensure working with reliable data is significantly important in order to use the gathered information to explore how the data are related to each other. Cronbach's Alpha is a coefficient used to indicate the internal consistency, which means a value above .7 for each scale of the data set (Pallant, 2016). The following Table 7 shows the Cronbach's Alpha values (see Appendix 6).

Table 7

Overview of the Cronbach's Alpha coefficients to check the reliability of the scales used for the correlation analysis

Scale	Cronbach's Alpha	Cronbach's Alpha based on Standardised Items	N of Items
F&V Intake	.649	.654	6
Availability	.790	.791	5
Accessibility	.745	.742	7
Workplace Design	.821	.821	7
Social Climate	.728	.736	10
Communication	.826	.827	7

Table 7 - Cronbach's Alpha

As all Alpha values for the independent variables Availability, Accessibility, Workplace Design, Social Climate and Communication are well above .7, those can be considered as acceptable. Values above .8 might even be seen as preferred values. The value of the independent variable F&V Intake is below .7 and might therefore be considered as not statistically reliable. It is also necessary to take into account that the "N of items" are relatively small numbers with less than 10 (Pallant, 2016) and therefore "it is sometimes difficult to get a Cronbach's Alpha value" (Pallant 2016, p. 104). As the Cronbach's Alpha based on Standardised Items is .654 and therefore very close to the recommended value of .7, this value is also seen as acceptable for this analysis (Pallant, 2016).

In order to perform a correlation analysis, a scatterplot for each combination of the dependent and independent variables is generated to verify that the assumptions of linearity and

homoscedasticity is not violated. The scatterplots (see Appendix 7) between the dependent variable F&V Intake and each independent variable given as Availability, Accessibility, Workplace Design, Social Climate and Communication indicate a linear relationship. The linear relationship is not perfect, but the scatterplot does not indicate a curved line. It already indicates that the correlations tend to be more weak than strong (Pallant, 2016).

In order to use the Pearson product-moment correlation for the further data evaluation, the distribution of the data collected should be roughly normal. The Normal Quantile-Quantile (Q-Q) Plots for the variables evaluated indicate a reasonably straight line (see Appendix 8), which suggests a normal distribution (Pallant, 2016). The histograms (see Appendix 8) of the dependent and independent variables also support the indication of a reasonably normal distribution. A normal distribution is given for the variables as the greatest frequency of scores is shown in the middle and smaller frequencies are shown to the extremes (Pallant, 2016). The histograms do not indicate a perfectly normal distribution for all variables but support the indication of a normal distribution, as identified with the Normal Q-Q Plot.

The Kolmogorov-Smirnov test supports the evaluation of the normality. The test is shown in the following Table 8.

Table 8

Overview of Sig. values gathered through the Kolmogorov-Smirnov Test of Normality with N (total) = 452

	Avail-ability	Access-ibility	Workplace Design	Social Climate	Commun-ication	F&V Intake
Sig.	.000	.000	.000	.000	.000	.000
Skew	.160	.050	-.008	.252	.129	.715
Kurtosis	-.558	-.054	-.311	.017	-.309	.507

Table 8 - Kolmogorov-Smirnov Test

For the Kolmogorov-Smirnov test, “a non-significant value indicates normality”, while this is given for “Sig. values of more than .05” (Pallant 2016, p. 63). As the Table 8 shows, a violation of this interpretation is suggested with values of .000 for all variables. Pallant (2016, p. 63) states that this is “quite common for larger samples”, which is seen in this case for a total N=452. The

Kolmogorov-Smirnov test in SPSS 25 also reports the scores for Skewness (Skew) and Kurtosis. A perfectly normal distribution would show scores for Skew and Kurtosis as of a value of 0. As shown in Table 8, most of the values are relatively close to zero (0). Tabachnick and Fidell (2013) state that the scores for Skew and Kurtosis are too sensitive and recommend using histograms for large samples with N > 200. This might explain why the histograms reviewed previously indicate a relatively normal distribution, while the Skew and Kurtosis are not exactly zero (0).

Checking the outliers, which are understood as extreme scores, is considered as part of the initial data screening activity. This supports validating a possible violation of the assumptions. The outliers are identified with the boxplots shown in the Appendix 8. In the following Table 9 the outliers are shown.

Table 9

Overview of the outliers identified for the dependent variable and the independent variables.

Variable	ID	Extreme Value
Accessibility	54613447	1.0
Social Climate	54995610	5.0
F&V Intake	54995610	4.5
	54997068	4.5

Table 9 - Outliers

The checking identified 4 outliers, which are not seen as extreme scores. The data provided through the survey are checked in terms of being an error and are confirmed for the further use of the dataset as genuine. The extreme values are shown in Table 9 and these values are in the range of the possible scores of the survey. These values are reviewed in more detail in the data set. SPSS 25 identified such values as outliers because these values are the scores of its group for the variable. In other words, the ID 54613447 is the only survey participant who selected such scores in the survey leading to the calculated mean value 1.0 for the variable accessibility. The outliers do not take any value, which is not feasible for the Likert-style scale value given from 1 to 5 in the survey (Pallant, 2016). It is not seen as needed to either delete or to assign different scores to the outliers. The outliers are kept and used in the analysing process in order to maximise the sample size used for the related discussion. This is supported by Pallant (2016, p.

160) stating that if for large samples only a few outliers are identified, "it may not be necessary to take any action".

4.1.2 Understanding Workplace Characteristics

To answer the first research question which aims to understand which workplace characteristics affect the employees' fruit and vegetables consumption at work, the quantitative data set collected through the online questionnaire is used. The following Table 10 shows the recommended Pearson product-moment correlation coefficients between the dependent variable F&V Intake and the independent Availability, Accessibility, Workplace Design, Social Climate and Communication (see Appendix 10). The correlation coefficients show small positive correlations between the fruit and vegetable intake and the workplace characteristics considered.

Table 10

Overview of the Pearson product-moment correlation coefficients between the F&V Intake and the independent variables

		Avail-ability	Accessibility	Workplace Design	Social Climate	Communication
F&V Intake	Pearson Correlation	.162	.047	.278	.222	.157
	Sig. (1-tailed)	.001*	.181	.000*	.000*	.001*
	N	393	384	382	379	374

Table 10 - Correlation Matrix

The correlations calculated are the baseline for the standard multiple regression. The data show that each independent variable (Availability, Accessibility, Workplace Design, Social Climate and Communication) is positively correlated to the dependent variable (F&V Intake). This means that the preselected workplace characteristics identified with the literature review are related to the intake of fruit and vegetables. It needs to be stated and taken into consideration that the correlations identified are relatively small. Pallant (2016) suggests following the guidelines from Cohen (1988), saying that a correlation (r) between r=.10 and r=.29 is small, r=.30 and r=.49 is medium and r=.50 and r=1.0 is large.

In a next step, it is required to consider the significant level of the explored correlations. Pallant (2016) points out that the significance of the values is strongly influenced by the sample size of the research. Statistical significance is traditionally reached for a Sig. 1-tailed value of $p<.05$. The Sig. 1-tailed value is used because specific hypotheses regarding the direction of the effect are given. The direction of the effect is that the workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication increase the fruit and vegetable consumption at work (Tabachnick and Fidell, 2013). For the variables reported in the correlation matrix shown in Table 10, statistical significance is found for all independent variables but Accessibility.

Accessibility does not even fall into the category of "small" with a correlation of $r=.047$ and it is not found to be statistically significant. The extreme small correlation and the non-statistical significance may recommend not to include this variable into the multiple regression analysis. As the research also aims to understand the differences of the workplace characteristics' impact on the fruit and vegetable intake of employees in different hierarchy positions, it might be the case that Accessibility is relevant for certain hierarchy positions. In addition, Accessibility is interrelated to Availability. Both variables are seen in the academic literature review as a minimum need in terms of the intake of fruit and vegetables.

Accessibility therefore requires consideration in the further evaluation and is not taken out for the multiple regression. All independent variables Availability, Accessibility, Workplace Design, Social Climate and Communication are therefore considered in the multiple regression analysis and in any other data evaluation process of this research. The matrix given in the following Table 11 shows the correlation between all variables (see Appendix 9). This is needed to check that the correlation between the independent variables is not too high. This is required in order to avoid violation of the standard multiple regression analysis too (Pallant, 2016). The bivariate correlation identified for this research is not too high. All correlation coefficients shown in Table 11 stay below a value of .7 (Pallant, 2016). This underlines the indicated significance and suitability of the correlation coefficients and the data collected with this analysis of the fruit and vegetable intake at work.

Table 11

Overview of the Pearson product-moment correlation coefficients between all variables to verify the bivariate correlation

		Avail-ability	Access-ibility	Workplace Design	Social Climate	Commun-ication
Availability	Pearson Correlation	1	.278	.322	.129	.438
	Sig. (2-tailed)		.000	.000	.012	.000
	N	393	384	382	379	374
Accessibility	Pearson Correlation	.278	1	.133	.038	.105
	Sig. (2-tailed)	.000		.009	.460	.042
	N	384	384	382	379	374
Workplace Design	Pearson Correlation	.322	.133	1	.192	.410
	Sig. (2-tailed)	.000	.009		.000	.000
	N	382	382	382	379	374
Social Climate	Pearson Correlation	.129	.038	.192	1	.171
	Sig. (2-tailed)	.012	.460	.000		.001
	N	379	379	379	379	374
Communication	Pearson Correlation	.438	.105	.410	.171	1
	Sig. (2-tailed)	.000	.042	.000	.001	
	N	374	374	374	374	374

Table 11 - Bivariate Correlation Matrix

4.1.2.1 Standard Multiple Regression Analysis

To justify the suitability of the identified Pearson product-moment correlation coefficients, it is necessary to verify the potential violation of the assumptions in the multiple regression analysis. SPSS 25 provides the information shown in the following Table 12 as the tolerance and variance inflation factor (VIF) values of the entered data variables.

Table 12

Overview of the statistic coefficients identified for the correlation between the workplace characteristics and the F&V Intake

Workplace characteristics	Tolerance	Variance inflation
Availability	.735	1.361
Accessibility	.919	1.088
Workplace design	.792	1.263
Social Climate	.951	1.051
Communication	.722	1.386

Table 12 - Coefficients

Pallant (2016) recommends a tolerance value higher than .10 in order to ensure that a high multiple correlation between the variables is not indicated. As shown in Table 12, all tolerance scores are well above .10, which indicates a low possibility of multicollinearity. The VIF verifies the violation of the assumptions. The VIF value is recommended to show values not higher than 10 to avoid indicating a multicollinearity. The values given are well below 10 and do not indicate a possibility of multicollinearity. The values discussed are within the recommended limits and a violation of the assumptions towards the multiple regression is not seen.

The outliers within the multiple regression analysis are detected using the scatterplot shown in Appendix 10. Following Pallant (2016, p. 160), who refers to Tabachnick and Fidell (2013, p 125), outliers show "a standardised residual of more than 3.3 or less than -3.3" in the scatterplot. The case with the highest standardised residual shows a value of 3.223. For the multiple regression analysis outliers therefore require no further consideration, as none of the cases are outside the recommended limit of 3.3 or -3.3.

In addition to the scatterplot, an inspection of the Normal Probability-Probability (P-P) Plot of the regression standardised residual makes it possible to verify that a violation of the assumption is not given (Pallant, 2016). The P-P Plot is shown in the Appendix 10. The P-P curve suggests that the data do not deviate majorly from the normality. This means that the residuals are normally distributed about the predictive dependent variable scores, which are the fruit and vegetable intake of employees at work. This is supported by the Casewise Diagnostics, shown in the following Table 13 (Pallant, 2016).

Table 13

Overview of the cases having standardised residual values above 3.0 or below -3.0

ID	Std. Residual	F&V Intake	Predicted Value	Residual
54997068	3.223	4.50	2.3355	2.16454
54996179	3.081	4.00	1.9304	2.06955

Table 13 - Casewise Diagnostics

This diagnostic shows only 2 cases falling outside the recommended range of above +3.0 or below -3.0 (Pallant, 2016). In a normally distributed sample, it is expected that only 1% of all cases fall outside this range. The lowest sample size of a workplace characteristic variable is N=374 and therefore actually allows up to 3.74 cases to fall outside this range. This maximum number of cases is not exceeded.

4.1.2.2 Evaluating the Model

To identify to which degree the variance in the dependent variable is explained with the model including the independent variables Availability, Accessibility, Workplace Design, Social Climate and Communication, the R-Squared is identified with SPSS 25. In this research, the value is given as .111. Converted into a percentage by multiplying the value with 100, this means the model explains 11.1% of the variance in the fruit and vegetable intake of employees at work. The remaining percentage-value of the variation in the fruit and vegetable consumption is presumed to be due to random variability or variables not measured with this research (Pallant, 2016).

In order to underline the indication that the regression model has statistically significant explanatory power, the ANOVA is show in the following Table 14.

Table 14

Overview of the statistically significant unique contribution

	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.742	5	4.148	9.196	.000
Residual	166.012	368	.451		
Total	186.754	373			

Table 14 - ANOVA Model

The ANOVA test shows that the model of this study reaches is statistical significance with the Sig. = .000, which really means p < .0005 (Pallant, 2016, p. 162).

4.1.2.3 Evaluating Independent Variables

In a next step, it is explored to which degree the variance can be uniquely attributed to the independent variables Availability, Accessibility, Workplace Design, Social Climate or Communication when the shared variance to the other independent variable is removed (Pallant, 2016). In order to draw further conclusions from the data, these coefficients needed to be reviewed as expressed in the following Table 15.

Table 15

Overview of the coefficients gathered with the multiple regression analysis to identify the unique contributions

Workplace Characteristics	Standardised coefficients Beta	Sig.	Part.
Availability	.067	.246	.057
Accessibility	-.009	.864	-.008
Workplace Design	.221*	.000	.197
Social Climate	.169*	.001	.165
Communication	.010	.869	.008

Table 15 - Coefficients Model 1

The largest beta is given for the variable Workplace Design with a beta of .221. This means that this variable makes the strongest unique contribution to explaining the fruit and vegetables intake of employees at work. Very close to this variable is the variable Social Climate with a beta of .169.

In order to verify how statistically significant this unique contribution to the equation is, the value in the column with the Sig value is needed. In both cases the value, with .000 and .001, is less than .05 and the variables are seen as "making significant unique contribution to the prediction" (Pallant 2016, p. 163) of the fruit and vegetable intake. The other independent variables Availability, Accessibility and Communication are not identified as significant unique predictors of the fruit and vegetable intake at work, as the Sig value is greater than .05 (Pallant 2016).

With the awareness of the independent variables having the most unique contribution, the part correlation can be identified. The score given in Table 15 needs to be squared in order to "get an indication of the contribution of that variable to the total R square" (Pallant, 2016, p. 163).

For the significant predictors Workplace Design and Social Climate, the R-Squared is impacted most, which means that the R-Squared would drop in a relatively high degree if these two workplace characteristics weren't included in the model. The part correlation squared score for Workplace Design (Part Correlation Squared = .0388) means that this predictor explains on its own 3.88% of the model's variance in terms of the fruit and vegetable consumption at work. The Social Climate (Part Correlation Squared = .0272) explains 2.72% of the total variances (Pallant, 2016).

The calculated multiple regression analysis predicts the fruit and vegetable intake at work based on the occurrence of the workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication. As expressed above, a regression equation was found $F(5, 368) = 9.196$, $p < .000$ with an R-Squared of .111. In the model, only the two measures were statistically significant, with the Workplace Design recording a higher beta value (beta = .221, $p < .000$) than Social climate (beta = .169, $p < .001$).

4.1.3 Understanding Employee Hierarchy Positions

To answer the second research question which aims to understand whether there is a difference in terms of the employee hierarchy positions and the required workplace characteristics to increase the actual fruit and vegetable consumption at work, the quantitative data set collected through the online questionnaire is used.

The organisational positions which the survey participants were able to choose from are Administrative Staff, Manager, Senior Manager, Executive Manager, Owner, Board Member or Similar and Other white-collar job (see definition 1.4).

For each role, the multiple regression analysis is run and the correlations between the workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication and the intake of fruit and vegetables are explored.

In a first step, the correlations between the independent variables and dependent variable per organisational position are explored. Table 16 shows the Pearson Correlations (see Appendix11).

For the evaluation of the correlations previously introduced definitions provided by Pallant (2016, p. 137) referring to Cohen (1988), are used.

A correlation is seen as small for the ratio of r=.10 to r=.29. A correlation smaller than r=.10 is assumed to be too small for consideration and it is therefore understood that a non-correlation exists.

The negative correlations express, in contrast to the positive relations, that reversed relations are to be expected.

Table 16

Overview of the Pearson Correlation scores between the F&V Intake and the independent variables per hierarchy employee position

Employee position		Avail-ability	Access-ibility	Workplace Design	Social Climate	Commun-ication
Administrative Staff	Pearson Correlation	.158	-.169	.198	.213	.134
	Sig (1-tailed)	.046*	.038*	.018*	.012*	.080
	N	115	112	112	112	111
Manager	Pearson Correlation	.198	.155	.295	.222	.117
	Sig (1-tailed)	.010*	.035*	.000*	.005*	.092
	N	139	137	135	134	131
Senior Manager	Pearson Correlation	.087	-.018	.259	.014	.263
	Sig (1-tailed)	.272	.452	.036*	.461	.034*
	N	51	49	49	49	49
Executive Manager	Pearson Correlation	.124	.241	.421	.393	-.022
	Sig (1-tailed)	.295	.153	.032*	.043*	.463
	N	21	20	20	20	20
Owner, Board Member or Similar	Pearson Correlation	.246	-.111	.327	.458	.092
	Sig (1-tailed)	.233	.372	.163	.091	.401
	N	11	11	11	10	10
Other White-Collar Jobs	Pearson Correlation	.173	.118	.315	.298	.241
	Sig (1-tailed)	.101	.195	.010*	.014*	.041*
	N	55	55	55	54	53

Table 16 - Correlation Matrix Extended by Employee Hierarchy Position

The overall strongest correlations are given for the variables Workplace Design and Social Climate. The workplace characteristic defined as Workplace Design for the organisational positions Executive Managers, Owner, Board Member or Similar and Other white-collar job shows an r value greater than .29. The correlations are seen as medium strong, as those fit into the ratio of r=.30 to r=.49 (Pallant, 2016).

The same is seen for the workplace characteristic defined as Social Climate when looking at the organisational positions Executive Managers and Owner, Board Member or Similar. Before moving on to the regression analysis, it is necessary to consider the statistical significance of the explored correlations in terms of the employee hierarchy positions. As mentioned previously, the statistical relevance is traditionally reached for a Sig. 1-tailed value of $p<.05$ (Tabachnick and Fidell, 2013). For the variables reported in the correlation matrix shown in Table 16, statistical significance is not given for all independent variables and hierarchy position combinations. Statistical significance is found for Availability and Accessibility, but only for Administrative Staff and Manager. The Workplace Design is found to be statistically significant for all employee groups but the group of Owner, Board Member or Similar. The Social Climate is statistically significant but not for Senior Manager and Owner, Board Member or Similar. The last variable Communication is making a statistical significance only for Senior Manager and Other White-Collar Jobs. The further data evaluation under the regression analysis provides the necessary data insights to present the results of this research into the required workplace characteristics affecting the employees' actual fruit and vegetable intake at work, considering the statistical relevance of the variables.

4.1.3.1 Standard Multiple Regression Analysis

The standard multiple regression analysis is applied in order to evaluate the correlation between the F&V Intake and the workplace characteristics, also considering in this section the different employee hierarchy positions within organisations. The grouping of employee hierarchy positions is considered for the group of managers, including the employee positions Manager, Senior Manager, the Executive Manager and the Owner, Board Member or Similar. As shown in the following Table 17, there is a small number of survey participants in the hierarchy group Senior Manager, Executive Manager and Owner, Board Member or Similar.

Table 17

Overview of the number of survey participants per employee hierarchy position

	Administrative Staff	Manager	Senior Manager	Executive Manager	Owner, Board Member or Similar	Other White-Collar Jobs
survey participants	115	140	51	21	11	57

Table 17 - Number of Survey Participants per Hierarchy Position

In order to ensure that the data and information collected through the survey are used in a meaningful way, the approach of collapsing categories is seen as reasonable. This approach allows the researcher to consider the available insights in terms of the hierarchy positions with a small number of survey participants to understand workplace characteristics (Wetzel and Carstensen, 2014).

The new hierarchy position "G-Manager" considers the Manager, Senior Manager, Executive Manager and Owner, Board Member or Similar positions. G-Manager stands for Group-of-Manager.

As it is unclear which kind of survey participants are shown under Other White-Collar Jobs, these survey participants' data are not merged into the G-Manager employee hierarchy position. This employee group shows a small number of employees.

The new employee hierarchy position G-Manager shows the following correlation and statistical significance in terms of the consumption of fruit and vegetables. In Table 18 the values are shown for the G-Manager employee hierarchy position (see Appendix 12).

Table 18

Overview of the Pearson Correlation scores between the F&V Intake and the independent variables for the new hierarchy employee position "G-Manager"

Employee position		Avail-ability	Access-ibility	Workplace Design	Social Climate	Commun-ication
G-Manager	Pearson Correlation	.155	.130	.291	.203	.122
	Sig (1-tailed)	.011*	.028*	.000*	.001*	.038*
	N	222	217	215	213	210

Table 18 - Correlation Matrix for G-Manager

In a first step of the data evaluation, the tolerance and VIF values are reviewed as shown in the following Table 18. This is needed, as explained earlier, in order to justify the suitability of the identified Pearson product-moment correlation.

Table 19

Overview of the statistics coefficients identified for the correlation between the workplace characteristics and the F&V Intake per hierarchy employee position

Employee position		Avail-ability	Access-ibility	Workplace Design	Social Climate	Commun-ication
Administrative Staff	Tolerance	.787	.850	.790	.967	.735
	Variance inflation	1.270	1.177	1.265	1.034	1.360
G-Manager	Tolerance	.684	.918	.742	.927	.674
	Variance inflation	1.462	1.090	1.348	1.079	1.484

Table 19 - Coefficients for Employee Hierarchy Positions

The tolerance scores are all well above .10 and indicate a low possibility of multicollinearity. The VIF values are well below 10 and support the non-multicollinearity. All values are within the

recommended limits. A violation of the assumption of the multiple regression analysis is therefore not seen (Pallant, 2016).

To check the outliers for the hierarchy positions, the scatterplots given in the Appendix 12 are used. All scatterplots show standardised residuals with values below 3.3, as Pallant (2016) recommends in order to identify outliers. The only exception is a single case with a standardised residual of 3.291 in the scatterplot for the selected cases of G-Manager. This case is on the limit mark and therefore not seen as an extreme outlier.

The Normal P-P Plot for the selected cases shown in the Appendix 12 suggests that the data do not majorly deviate from the normality. The normality is supported by the Casewise Diagnostics, shown in the following Table 20.

Table 20

Overview of the statistics coefficients identified for the correlation between the workplace characteristics and the F&V Intake per hierarchy employee position

Employee position	ID	Std. Residual	F&V Intake	Predicted Value	Residual
G-Manager	54997068	3.291	4.5	2.3451	2.14586

Table 20 - Casewise Diagnostics for Employee Hierarchy Positions

This diagnostic shows that only 1 case falls outside the recommended range of above +3.0 or below -3.0 of the regression standardised residual (Pallant, 2016). In a normally distributed sample, which is given for this data set as expressed earlier, 1% of all cases are expected to be not within this recommended range of +3.0/-3.0. This is seen as a met circumstance with one outlier.

4.1.3.2 Evaluating the Model

The R-Squared for the different groups of employee hierarchy positions are shown in the following Table 20. The R-Squared for the overall all multiple regression discussed earlier was introduced as .111.

Table 21

Overview of the R-Squared per hierarchy employee position

Employee position	Administrative Staff	G-Manager
R-Squared	.139	.112

Table 21 - R-Squared for Employee Hierarchy Positions

This means that the model explains 13.9% of the variance in the fruit and vegetable intake at work for employees in an Administrative Staff role, and for employees in a G-Manager role it explains 11.2% of the variance (Pallant, 2016). The majority of the data are given by survey participants with a G-Manager role, leading to the effect that the R-Squared for G-Manager is very close to the overall R-Squared (11.1%). The predictability of the Administrative Staff is in a value which is close to the overall R-Squared. As the survey participants with an Administrative job role represent a minority compared to survey participants with a G-Manager role, the R-Squared deviates from the overall R-Squared.

To support the evaluation that the model has statistically significant explanatory power, the ANOVA is shown in the following Table 22.

Table 22

Overview of the statistically significant unique contribution

Employee position		Sum of Squares	df	Mean Square	F	Sig.
Administrative Staff	Regression	6.506	5	1.301	3.389	.007
	Residual	40.313	105	.384		
	Total	46.819	110			
G-Manager	Regression	10.973	5	2.195	5.164	.000
	Residual	86.706	204	.425		
	Total	97.680	209			

Table 22 - ANOVA Model for Employee Hierarchy Positions

The Sig. value tested with ANOVA shows an acceptable statistical significance for employees in an Administrative Staff job role as well for employees in a G-Manager job role, with the values reported as .007 and .000 (Pallant, 2016).

4.1.3.3 Evaluating Independent Variables

To support the understanding of the workplace characteristics required to affect employees' fruit and vegetable consumption, in a next step it is explored to which degree the variance can be uniquely attributed to the independent variables Availability, Accessibility, Workplace Design, Social Climate or Communication when the shared variance to the other independent variable is removed (Pallant, 2016). In order to draw further conclusions from the data, these coefficients must be reviewed as expressed in the following Table 23. Due to the grouping of all Manager positions, this is only done for the new employee hierarchy position G-Manager and Administrative Staff.

Table 23

Overview of the coefficients gathered with the multiple regression analysis to identify the unique contributions

Employee position	Workplace Characteristics	Standardised coefficients Beta	Sig.	Part.
Administrative Staff	Availability	.182	.077	.161
	Accessibility	-.245*	.014	-.226
	Workplace Design	.145	.157	.129
	Social Climate	.158	.089	.156
	Communication	.047	.655	.041
G-Manager	Availability	.040	.618	.033
	Accessibility	.084	.223	.081
	Workplace Design	.249*	.001	.214
	Social Climate	.136*	.049	.131
	Communication	-.039	.630	-.032

Table 23 - Coefficients Model 1 for Employee Hierarchy Positions

The largest beta is given for the variable Workplace Design for G-Manager, with a score of .249. The statistical significance is given if the Sig. value is less than .05 (Pallant, 2016), which is reported for this largest beta. This means that this variable and employee position combination makes the strongest unique contribution to explain the fruit and vegetable intake of employees at work.

Accessibility for Administrative Staff and Social Climate for G-Manager also show a statistical relevance. It needs to be recognised that the standard coefficients Beta for Accessibility in relation to F&V Intake is negative for the Administrative Staff. A negative value refers to the direction of the explored relationship and does not express the strength of the value (Pallant, 2016). The meaning of this for the research objective is debated in the discussion of this research.

When part correlation score of the coefficients model 1 squared, "an indication of the contribution of" the dependent variables "to the total R square" is given (Pallant 2016, p. 163). This value is called part correlation squared. It means to which degree R-Squared would drop if a predictor wasn't included in this model (Pallant, 2016).

The part correlation squared for Workplace Design (G-Manager) is .0457, for Social Climate (G-Manager), it is .0171 and for Accessibility (Administrative Staff), it is .0510. This means that the predictor Workplace Design explains on its own 4.57% of the model's variance in terms of the fruit and vegetable intake at work. The Accessibility for Administrative staff explains 5.1% and Social Climate for G-Manager 1.71%.

In summary, the multiple regression analysis considering the different employee hierarchy positions found a regression equation for G-Manager $F(5,204) = 5.164$, $p < .005$, with an R-Squared of .112 and for Administrative Staff $F(5, 105) = 3.389$, $p < .005$, with an R-Squared of .139. In the model, only three measures were statistically significant, with the Workplace Design for G-Manager recording a higher beta value (beta = .249, $p < .005$) than Social Climate for G-Manager (beta = .136, $p < .005$) and Accessibility for Administrative Staff (beta = -.245, $p < .005$).

4.2 Exploring Additional Workplace Characteristics

In the process of exploring additional workplace characteristics, the qualitative data are used. The online questionnaire collected these qualitative data in order to enrich this study. The

purpose of this approach is to ensure that relevant aspects of the workplace environment are taken into consideration and further perspectives on workplace characteristics are studied.

The data set downloaded from the online questionnaire tool is provided in an Excel spreadsheet. The data set was uploaded to SPSS 25 after the analysis of the data. For the qualitative data analysis, an adapted approach to the content analysis was used in in order to evaluate the information collected (Bryman and Bell, 2011). This approach was selected to get most insights out of the open-ended question answers in order to answer the research questions.

Berelson (1952, p. 18) defines content analysis as "a research technique for the objective, systematic and quantitative description of the manifest content of communication". Bryman and Bell (2011) state that this description is probably the best-known for content analysis. Content analysis is a technique which also allows the researcher to quantify the available qualitative data in a systematic and replicable manner. The technique makes it possible to count data sets using a coding process (Bryman and Bell, 2011).

Traditionally, content analysis requires creating a coding schedule, which is a "form into which all the data relating to an item being coded will be entered" (Bryman and Bell 2011, p. 299). The coding schedule shows an overview of single categories where information is required to answer the research questions. The coding schedule is completed by using the coding manual. The coding manual is like a dictionary and states the instructions required to classify the text analysed. Each category of the coding schedule has predefined answers; these are the codes the researcher is looking for. With the coding manual, the coding schedule can be completed per individual participant of the research who provided data (Bryman and Bell, 2011). For example, the coding manual shows for an identified theme called "hygienic conditions" the codes "yes" or "no", depending on which answer the research participant provided. The coding schedule then shows that for participants with the ID "ABCDE", the answer is "yes".

This approach is applied in the DBA thesis called "Mixed method research designs: a case study of their adoption in a doctor of business administration program" (Miller and Cameron, 2011). This work analysed and coded 186 other DBA theses to meet its research aim. The categories were predefined in order to compare, in accordance with the content analysis approach, the theses in scope.

The codes of a content analysis approach can be created deductively or inductively, depending on the research design (Bengtsson, 2016). Bengtsson (2016) introduces the inductive approach as the process of developing subjects or categories from the new data being collected. This is then used to come up with new theories and ideas. The process described fits this research. It is applied for this research to explore the qualitative data because of the study philosophy described in chapter 3.1.1, aiming to produce additional insights to enrich the implications and recommendations of this research.

The application of the content analysis aims to enrich the explored information from the quantitative data with additional insights and explore whether new ideas, perspectives or sources for theories exist. As study participants are allowed to provide additional qualitative information required to explore the workplace conditions affecting the fruit and vegetables consumption at work, it is feasible to deduce the subjects and categories for the content analysis when reading through the provided text with an open mind (Bengtsson, 2016). The adaption of the content analysis approach identifies commonalities in the provided qualitative information in what research participants respond to the 7 qualitative questions (Bryman and Bell, 2011).

The data sets needed for this research to quantify the information are the content provided by the research participants as free text. The deducted themes may be either a new subject or an already known subject identified through the literature review. If the subject is a known theme, this is excluded for the next steps of the content analysis. It might be argued that this reduces the quality of the provided information, but as the purpose of the qualitative data is seen as identifying additional employee barriers or needs to affect the actual fruit and vegetable intake, working with repeated information does not provide analytic information.

This approach is derived from the work “How to plan and perform a qualitative study using content analysis” which Bengtsson (2016) published. She states that “dross”, which does not provide additional value to answer the research questions, can be excluded from the content analysis. As a repetition of already known and quantitatively evaluated data does not provide additional value to answer the research questions, it is seen as justified to exclude the known themes from the coding manual. The purpose of the qualitative data set is to understand in more detail which barriers exist and what is needed from an employer to increase the fruit and vegetable intake of white-collar employees.

This information requires a detailed review process to extract the content which helps to explain the qualitative data collected (Creswell and Clark, 2018). The data set is separated from all other collected information but the "answer ID". The answer ID is the numerical code created by the survey software per survey participant. To avoid doubt, the answer ID is anonymous and within the approved ethical concept. Each qualitative question is reviewed independently and a spreadsheet for each qualitative question is created. In a next step, each free text answer is read and briefly summarised into the main message of the survey participant. As the qualitative questions were optional to answer, several survey participants did not provide qualitative data.

As a final step, the main messages of each survey participant answer ID were reviewed to explore commonalities. One or multiple themes were given to each message. For example, the participant answer ID 54649400 stated in the first open-ended question that a bad kitchen exists in the office and that food preparations must be done on the office table. The theme seen in this statement is Accessibility.

It should be stated that from reading through the answers of the open-ended questions, it seems that the survey participants provided far more details about what employees recommend or ask for in the workplace environment than which barriers or needs currently exist or are noticed.

Once these steps are completed, each survey participant answer ID is given for each open-ended question a code to express whether a survey participant mentioned one of the identified themes in the free text answers. The codes used are 1 = no and 2 = yes. The code 1 = "no" is used for all participant ID's who did not answer the open-ended question at all or indicated with the answer, that the question is not applicable to its situation. If a survey participant mentioned a theme, the code 2 = "yes" is used for this survey participant ID. The themes are understood as additional workplace characteristics which have the potential to affect the actual fruit and vegetable consumption at work. Some participants mentioned more than one or two barriers. The number of participants is therefore smaller than the collected feedback positions.

The understanding and the fundament for the discussion derived from reading through the qualitative data set forms the definitions of the workplace characteristics (themes). Survey participants mentioned different themes. For the definitions derived from the qualitative data, see Table 24. The following sections briefly describe the qualitative open-ended questions and how the data listed in Table 24 are developed.

4.2.1 Barriers in the Workplace

The survey questions 54, 55 and 56 are very similar, and explore the barriers employees see as preventing them from eating fruit and vegetables at work. The differentiator is the location. Question 54 considers the workplace, question 55 the workspace and question 56 the office. The office is the building of the employer. The workspace is the area in the office where the employee works, such as a room or a corridor in the office. The workplace is the area where the employee is executing the job-related activities such as the employee's desk (Oldham and Rotchford, 1983; Myerson and Bichard, 2010). The questions were asked separately during the survey in order to cover different perspectives. The aim was to understand the barriers which might be related to the workplace, workspace or office. The themes identified here are the barriers which the research is looking for as additional insights of the workplace characteristics.

After taking out the already known themes related to Availability, Accessibility, Workplace Design, Social Climate and Communication, the new themes understood as a barrier to consuming fruit and vegetables at work are identified. These are Distance, Time, Space, Hygienic Conditions, Storage, Lounge missing and Rules. The definition of these themes is given in Table 24.

4.2.2 Encouraging Workplace Conditions

In order to identify workplace conditions which employers already offer today and which lead to a fruit and vegetable consumption by their employees, question 57 is concerned with workplace conditions encouraging the employees' fruit and vegetable consumption. The themes identified here are the workplace conditions which employers already provide in order to achieve employee fruit and vegetable intake.

After taking out the already known themes, either gained from the previously asked qualitative questions or from the literature review for the variables of the quantitative section of this research, the new theme Free F&V products is identified. The definitions of these themes are given in Table 24.

4.2.3 Recommended Interventions – Physical Workplace

With question 58 of the survey, it is identified which interventions the survey participants recognise as affecting their actual fruit and vegetable consumption. The question asks to focus

on the physical workplace. The physical workplace is understood as the touchable elements and design of the work environment (Vezina, 2004; Lund et al., 2006).

Looking at the qualitative information provided by question 58, it is noticed that all of the additional insights gained are already covered through the new themes introduced previously or through the variables used for the quantitative evaluation of this research. This means that there were no additional or further insights collected with this question. This does not reduce or limit the importance of this question. For the qualitative data evaluation, it is reviewed how often survey participants mention or explain a theme. Also, different individual perspectives of a similar theme are received and looked at.

4.2.4 Recommended Interventions – Psychosocial Workplace

Question 59 is supposed to be very similar to question 58, while the difference is the focus on the psychosocial workplace conditions. This includes primarily the relation between the human beings in the office. This means the situation between employees, independently of their hierarchy positions within the employer's organisation (Vezina, 2004). The themes identified therewith are the recommendations from the survey participants in terms of the conditions of the psychosocial workplace.

After taking out the already known themes, either gained from the previously asked qualitative questions or from the literature review for the variables of the quantitative section of this research, the new theme of Joined Cooking is identified. The definition of this theme is given in Table 24.

4.2.5 Other Support

The final qualitative question 60 of the survey is a wider open-ended question asking for any other support which the survey participant may think of to affect the actual fruit and vegetable consumption at work.

The aim of this question is to ensure participants have a place to provide any kind of information relevant to answering the research question. Like for the other qualitative questions, the content analysis approach is used to gain any insights for the research conclusion. The themes identified therewith are any other support the survey participants may think of which is required from the employer to affect the fruit and vegetable intake. After taking out the already known themes,

either gained from the previously asked qualitative questions or from the literature review for the variables of the quantitative section of this research, the new themes Sport Offering and Health Check are identified. The definition of these themes is given in Table 24.

4.2.6 Presenting Additional Workplace Characteristics

Having worked through the qualitative data set to identify the themes which are relevant for employees in terms of the actual fruit and vegetable intake, the following table shows an overview of the themes created through the evaluation of the open-ended qualitative questions.

These themes are additional workplace characteristics which need to be considered along with the evaluated quantitative workplace characteristics if the aim is to affect the actual fruit and vegetable intake of employees at work in order to reduce the impact of presenteeism.

These insights help to answer the first research question which aims to understand which workplace characteristics affect the employees' fruit and vegetables consumption at work. As previously mentioned, the following Table 24 shows the themes indicating barriers or needs which are experienced by the survey participants.

These additional identified workplace characteristics are added to the quantitative data set in SPSS 25. This means that the identified themes in this coding manual are added as single attributes to the quantitative data set. Each theme receives per survey participant the code 1 (no) or 2 (yes).

This allows the researcher to link the data from the qualitative section with the data from the quantitative section in order to derive in depth conclusions. Through using an anonymized ID for each survey participant, the quantitative data and the qualitative are brought together per ID number.

Table 24

Overview of the themes identified to be considered affecting the fruit and vegetable intake

Consumption barriers (themes)	Reported answers per theme	Definition
Free F&V Products	74	Offering fruit and vegetables to employees without costs.
Hygienic Conditions	55	Ensure a clean and appropriately maintained kitchen to store and prepare fruit and vegetables.
Lounge Missing	23	A relaxing area additionally to the desk or canteen to eat fruit and vegetables.
Distance	22	Distance between the workplace and the canteen, or a place to prepare or to eat.
Rules	19	Rules which do not allow eating at the employee desk or while working.
Time	21	Time to eat fruit and vegetables or to prepare these at work.
Storage	10	The place where fruit and vegetables from the employees can be stored, e.g. during the day.
Joined Cooking	2	To cook together in a special event e.g., but also to cook in parallel in the same kitchen.
Outside Eating	1	Eating outside of the building, in the sense of staying within the employer's area.
Health Checks	1	Health checks for employees at work as a caring employer behaviour.
Sport Offerings	1	Locations or opportunities to do sport for fitness at the worksite.

Table 24 - Explored Qualitative Themes

As the qualitative data is collected through the online questionnaire with non-mandatory questions, such additional data show a limited number of participant answers. The qualitative data has limited strength because of the limited number of answers. In total, the online questionnaire has 452 survey participants, and up to 178 participants provided qualitative data. The two most commonly mentioned themes understood as barriers to the consumption of fruit and vegetables at work are “free fruit and vegetables” and “hygienic conditions”. In total, 73 survey participants mentioned Free F&V Products and 55 survey participants mentioned Hygienic Conditions as an additional workplace characteristic to be taken into consideration. Themes mentioned by less than 50 survey participants are not taken further in the evaluation and discussion process of the qualitative data. A small sample below 50 participants within the snowball sampling approach of this study may impact the validity of the qualitative data (Bryman and Bell, 2011; Creswell and Clark, 2018).

The qualitative data add information and knowledge to this study in order to explain the workplace characteristics affecting the actual fruit and vegetable consumption of white-collar employees. This means that with the qualitative data, it is verified that no critical or relevant workplace characteristic is ignored or not evaluated because the academic literature is not aware of these characteristics yet. The qualitative data support the consideration of further perspectives and enrich the explanation of workplace characteristics affecting the fruit and vegetable intake. Insights are deduced by linking the themes with other variables collected. The relationship between the qualitative identified themes from the coding Manual in Table 24 and the variables presented in the following Table 25 are identified in this way. Appendix 14 shows the tables for the summary provided.

Understanding such relations helps to understand in more detail the employee needs which affect the actual fruit and vegetable intake at work. The variables age, gender and organisational position are collected in the survey to understand in detail the qualitative data. The workplace characteristics which are relevant for employees may vary depending on the different employee groups in terms of age, gender or employee hierarchy position in the organisation (Watters, Satia and Galanko, 2007; Shin, 2014; Kurschner, 2019).

These variables support an understanding of the source of a qualitative perspective, whether it is gender- or age-driven or depending on a specific employee hierarchy. These perspectives are useful in understanding new theories or knowledge (Bryman and Bell, 2011). This means that the

two additional workplace characteristics are reviewed with variables in order to understand whether the additional workplace characteristics are mentioned by a specific employee group. The differences between the variables used provide insights into the statistical significance and how the explored themes answer the research questions. In other words, it should be identified whether the themes are associated with other variables collected with the online questionnaire. In the following Table 25 the variables linked to the themes are shown.

Table 25
Overview of the variables tested and whether these are associated with the qualitative themes identified through the qualitative data

Group	Variables	Measure
Questionnaire variable	Age	Ordinal
	Gender	Nominal
	Organisational Position	Nominal
Calculated variable	F&V Intake	Scale

Table 25 - Qualitative Data Evaluation

The survey participants who provided qualitative information are spread across all age groups. The majority of additional themes are provided by survey participants in the age-group <30. In this age group were 45 of the 74 survey participants who mentioned Free F&V Products and 27 out of the 55 survey participants who mentioned Hygienic Conditions. The weakest age group is 40>, with 17 answers from survey participants for Free F & V Products and 14 answers for Hygienic Conditions. The split in terms of gender shows that females provide more qualitative feedback about additional workplace characteristics relevant in terms of F&V consumption than men. 44 female survey participants out of 74 provided insights related to Free F&V Products. 39 female survey participants out of 55 provided insights related to Hygienic Conditions.

The organisational position has a large effect in the case of the groups Administrative Staff and Manager, meaning that the majority of the additional qualitative information comes from these job roles. Altogether, 50 survey participants out of the 74 answers in total for Free F&V Products

hold one of these two job roles. For Hygienic Conditions, 40 survey participants from the total 55 mentioned this theme. The other employee hierarchy positions show weak answers. It should be pointed out that the only hierarchy position not mentioning Hygienic Conditions is the group of Owner, Board Member or Similar. These insights are useful in answering the second research question aiming to understand whether there are differences in terms of the employee hierarchy positions and the required workplace characteristics to increase the actual fruit and vegetable consumption at work.

The actual fruit and vegetable intake of the participants who provided insights into additional workplace characteristics are either high or very high for both themes Free F&V Products and Hygienic Conditions. The response of survey participants with a lower fruit and vegetable intake is very weak.

4.3 Brief Summary of this Chapter

This chapter presented the findings of this research. To understand the known workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication the quantitative data analysed. For the evaluation of the quantitative data SPSS 25 and a standard multiple regression analysis was used.

For the standard multiple regression analysis the assumptions were checked and a violation was not seen. The employee hierarchy positions were considered to understand in more detail differences in the consumption of fruit and vegetables between employee groups. Workplace Design, Social Climate and Accessibility were found as variables making a statistically significant unique contribution.

To understand the additional required workplace characteristics from the survey participants a content analysis was applied. The deducted themes were linked to the quantitative data in SPSS 25. In this research study, the explored additional workplace characteristics employees may require to increasing their fruit and vegetable intake are Free F&V Products and Hygienic Conditions.

In the next chapter the findings are discussed, put into context together with the academic literature and a contribution to practice is indicated.

5 Discussion

This chapter addresses the analysed data from the previous chapter and links it to the research gap identified in understanding the workplace characteristics required to affect the fruit and vegetable intake of employees at work. The research questions are answered, and the significant results are discussed in regard to existing academic knowledge following practical implications.

5.1 Overview

To close this research gap, it is seen to be of practical relevance, as the work of Merrill et al. (2012) shows, that presenteeism can be affected positively through the consumption of fruit and vegetables. The intake reduces the organisational cost impacts occurring through presenteeism. The scope of this research focuses on employees in white-collar jobs in the German manufacturing industry. This research area is set for this study as this employee class shows the highest presenteeism rate and offers an area for practical impacts in organisations aiming to affect their employees' performance (Aronsson and Gustafsson, 2005; Garrow, 2016; Burton et al., 2017).

The exploration of the quantitative data is separated into findings using the preselected workplace characteristics Availability, Accessibility, Workplace Design, Social Climate and Communication. Both research questions are discussed together for each individual workplace characteristic. The quantitative data evaluation is based on a standard multiple regression analysis. The results of the regression analyses are used to answer the research question 1 and research question 2. This is the main source for the conclusion. The standardised coefficients (Beta) illustrate the contribution a workplace characteristic has to employees' actual fruit and vegetable consumption.

The qualitative data provide additional information collected through the format of open-ended questions in the online questionnaire in order to allow the deduction of further practical viewpoints. For the practical discussion, it is of interest to understand which additional barriers or needs affect the employees' actual fruit and vegetable consumption. Recommended interventions, which employers can consider in order to affect employees' fruit and vegetable consumption, are discussed.

The relationship to the theoretical and literature background is reviewed in order to gain insights on the related impacts. This chapter discusses the findings of this research under the umbrella of a practical management perspective in order to recommend practical actions. The findings of

this research are discussed alongside the existing literature to explore the workplace characteristics. The academic and the practical impact of the quantitative and qualitative data collected is reviewed and discussed. In this chapter, the limitations of this thesis are presented and discussed in terms of the practical and theoretical implications. The elements for future research are presented to allow other researchers to benefit from this research's findings. The actual work and the framework used for this research are reviewed and used for a critical research reflection.

5.2 Relevance of Workplace Characteristics

5.2.1 Key Findings of Research

The results of this research indicate that a fruit and vegetable consumption for white-collar employees across all employee hierarchy positions can be significantly predicted through the Workplace Design and the Social Climate. Considering the employee hierarchy positions, Workplace Design and Social Climate are also recommended as significant predictors for the intake of fruit and vegetables, but only for those employees in a G-Manager role. Accessibility is recommended as a significant predictor for Administrative Staff only.

In the following Figure 2, the standard coefficients (Beta) are listed per workplace characteristic for the Administrative Staff, the G-Manager and for all survey participants across all employee hierarchy positions. This illustration supports the deduction of additional perspectives from the explored regression model towards the prediction of a fruit and vegetables consumption at work.

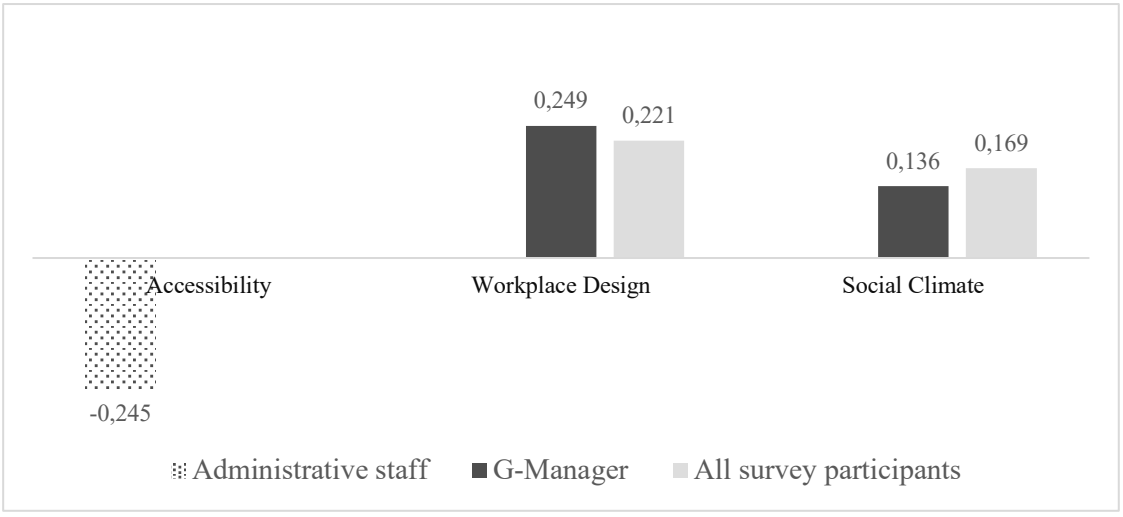

Figure 2 - Standard Coefficients (Beta) and Employee Hierarchy Positions

The regression analyses applied for this research indicate that the workplace characteristics Workplace Design, Social Climate and Accessibility have a small effect on the fruit and vegetable consumption of employees at work. This is independent of whether the employee hierarchy is considered or not. The standard coefficients (Beta) are small and indicate that the contribution given by the workplace characteristics Workplace Design, Social Climate and Accessibility is not very strong in order to affect the employees' fruit and vegetable consumption at work.

This might be understood as an indication that the independent variables Workplace Design, Social Climate and Accessibility are not important enough to predict the actual fruit and vegetable intake at work. An explanation as to why the effect size is small could be that the actual consumption of fruit and vegetables is an employee-individual decision which cannot be extrinsically affected by an employer (Cerasoli, Nicklin and Ford, 2014). This assumption is supported by a survey participant statement in the open-ended qualitative feedback expressing that he/she does not see the employer as having any responsibility in terms of fruit and vegetable consumption of employees. The discussion needs to consider whether, in practical terms, the impact of the predictors is negligible.

The study demonstrates further that there is not an ascending order in the explored standard coefficients in terms of the employees' organisational positions. An ascending order in this context means that the organisational positions become higher starting with the Administrative Staff on a lower employee level and rising up to the top management, described as the Owner or the Board Member level (Watson and Korczynski, 2011; Harunavamwe and Kanengoni, 2013). The explored standard coefficients are neither increasing nor decreasing, similarly to the organisational positions. This means that the workplace characteristics explained must be discussed individually per employee hierarchy position. The workplace characteristics may vary from hierarchy position to hierarchy position.

5.2.2 Research Questions

The research questions of this thesis aim to close the research gap seen as the missing academic knowledge on which workplace environment affects white-collar employees' actual fruit and vegetable intake at work. There exists knowledge on single workplace characteristics, but to the knowledge of this study, there is no other study found considering multiple workplace characteristics at the same time. In addition, it is aimed to understand any differences in the workplace characteristics required based on employee hierarchy positions.

The defined research questions of this study are answered with the applied standard multiple regression.

Research question 1:
Which workplace characteristics affect employees' fruit and vegetables intake at work?

This research found that the Workplace Design and the Social Climate are the workplace characteristics which make statistically significant unique contributions to the consumption of fruit and vegetables at work across all employee hierarchy positions. This means that Workplace Design and Social Climate are the workplace characteristics to be considered for interventions, if an employer aims to affect employees' fruit and vegetable intake at work. The actual strength to achieve such an effect through these two workplace characteristics is seen as weak positive. Workplace Design and Social Climate might therefore be limited in their effectiveness in achieving an actual increase in the consumption of fruit and vegetables. This means, from a practical point of view, some more fruit and vegetables will probably be consumed but interventions changing the Workplace Design and the Social Climate will probably not lead to a dramatic increase in fruit and vegetable intake. This limits the potential that this increased consumption could impact the degree of presenteeism in such a way that the related organisational costs are reduced.

Research question 2:
Are there differences to be considered within the employee hierarchy in terms of the required workplace characteristics?

The breakdown into the employee hierarchy positions found that there are differences to be taken into consideration in terms of the workplace characteristics. The key finding is that Accessibility shows a negative contribution to explaining the fruit and vegetable intake of Administrative Staff. This means that any effect achieved through an intervention in Accessibility does not have the effect of increasing the fruit and vegetable intake. This may indicate that interventions should be chosen carefully. There is a risk that an intervention may have a negative effect on the actual fruit and vegetable intake of a specific employee group. Taking the different employee hierarchy positions into consideration also shows that for G-Manager, the workplace characteristics Workplace Design and Social Climate are the contributors to explaining the fruit and vegetable intake for this employee hierarchy position.

As these are the same workplace characteristics explored across all employee hierarchy positions, the research question 2 did not find any other differences which indicate a different conclusion compared to the conclusion given for research question 1. The employee hierarchy position G-Manager is created using a collapsing across categories approach. This hierarchy position considers the employee groups Manager, Senior Manager, Executive Manager and Owner, Board Member or Similar.

5.2.3 Effectiveness of Findings

The relevance of the explored contributions which the workplace characteristics make towards the fruit and vegetable consumption at work is discussed next in order to have a foundation for the discussion of the specific workplace characteristics.

The model used to explore the workplace characteristics suggests that Workplace Design and Social Climate are predictive in the fruit and vegetable consumption of employees across all hierarchy positions at work. Considering these different employee hierarchy positions, the model used also suggests that Accessibility is predictive for the Administrative Staff. In order to evaluate whether this prediction is within an acceptable range to discuss this research's topic, other research is taken into consideration. The paper "Social integration and post-adoption usage of Social Network Sites" (Sánchez-Franco, Villarejo-Ramos and Martín-Velicia 2011) shows that evaluating human behaviour typically leads to lower R-Squared values, due to the difficulty of predicting humans. For this research, the human behaviour can be seen as the employees' actual consumption of fruit and vegetables at work (Kothe and Mullan, 2015).

It might be argued that the relation between the work of Sánchez-Franco, Villarejo-Ramos and Martín-Velicia (2011) and this research is not close enough to justify that the prediction value is strong enough. In a closer relation to this research might be the work of Vakili and Khadem-Rezaiyan (2016), who aim to find the most important intermediate factors of a fruit and vegetable intake. The R-Squared of their work is .11 and even a bit smaller than the R-Squared explored in this research. For research question 1, which does not take the employee hierarchy position into consideration, an R-Squared of .111 is given. For the research question 2, which considers the employee hierarchy position, an R-Squared of .139 is given for Administrative staff and .112 for G-Manager. The work of Vakili and Khadem-Rezaiyan (2016) therefore justifies saying that the findings of this research can be taken into further consideration.

The work of Menozzi and Mora (2012) is cited a few times in this research as a reference in the academic literature. They worked with the Theory of Planned Behaviour and experienced an R-Squared in terms of the consumption of fruit and vegetables of 0.15. This value is a bit greater than the R-Squared identified in this research in terms of the workplace characteristics affecting the fruit and vegetable intake at work. It is seen as adaptable to discussing the behaviour of employees in terms of their fruit and vegetable intake as the R-Squared of this research is in an acceptable range of the R-Squared which Menozzi and Mora (2012) explored for their work.

For this research, the R-Squared explored is seen as applicable for further discussion because of the work headlined ""Psychosocial correlates of dietary intake". In this work, it is stated that "generally low predictiveness, R^2 <0.3" (Baranowski, Cullen and Baranowski 1999, p. 19), is given exploring the fruit and vegetable intake and its conditions. This does not imply that the findings of this research are not useful to answering the research questions of this thesis. As mentioned earlier, the discussion of the workplace characteristics needs to consider the practical use of the findings. It is therefore necessary to look in more detail at the workplace characteristics explored. The differentiation between the employees' hierarchy positions is seen as crucial in a more detailed discussion in order to understand the workplace characteristics effect on the employees' fruit and vegetable intake. The breakdown according to the employee hierarchy positions allows the researcher to explore the workplace characteristics required for specific employee groups.

The research with the headline "Social cognitive model of fruit and vegetable consumption in elementary school children" (Reynolds et al., 1999) shows an R-Squared with a range of .11 to .17 depending on the model used.

The academic references of Sánchez-Franco, Villarejo-Ramos and Martín-Velicia (2011), Vakili and Khadem-Rezaiyan (2016), Menozzi and Mora (2012) and Reynolds et al. (1999) support the discussion of this research and underline that fact that the discussion has academic and practical usage.

The multiple regression analysis shows that the workplace characteristic Workplace Design shows the most unique contribution to explaining the employees' fruit and vegetable intake at work in this research. The Social Climate does not have as strong an impact as the Workplace Design. However, the Workplace Design and the Social Climate impact the R-Squared the most due to their contribution. This means that the R-Squared would drop in a relatively high degree

if these two workplace characteristics were not included in the model (Pallant, 2016). This underlines the relevance of these two workplace characteristics and suggests their consideration when aiming to affect the actual fruit and vegetable intake. As discussed previously, the R-Squared value identified for this research seems to be in an acceptable range compared to other research studies, even if the value itself is not explicitly high. The most unique contribution to explaining employees' fruit and vegetable intake, given by Workplace Design, is therefore very important. The drop of the R-Squared may reduce the strength in explaining the fruit and vegetable intake. Workplace Design might therefore be suggested as the most relevant and affecting workplace characteristic in terms of the intake of fruit and vegetables.

Workplace Design and Social Climate together explain 6.6% of the total variances in the fruit and vegetable consumption at work. The two workplace characteristics Workplace Design and Social Climate therefore merit serious consideration in the discussion on affecting the fruit and vegetable intake at work through the workplace characteristics. Organisations aiming to affect their employees' fruit and vegetable consumption at work may therefore start considering executing interventions in these two workplace characteristics first.

5.2.4 Workplace Design

In the understanding of this research, Workplace Design means that a modern and ergonomic appropriate workplace exists. This also includes enough space for employees to move and handle activities, pleasant indoor climate, adequate noise level and an overall encouraging design for the consumption of fruit and vegetables. As an independent variable in this research, Workplace Design is measured through the elements described as the way the workplace is actually set up and designed by the employer, including modern and ergonomic workplace, space, air and noise conditions as well as workplace design stimulations.

The results demonstrate that the Workplace Design, as defined previously, is the workplace characteristic in this research study which shows the strongest statistically significant unique contribution to explaining fruit and vegetable consumption in the workplace, without taking the employee hierarchy positions into consideration.

The results indicate further that the Workplace Design makes a small positive contribution towards explaining the fruit and vegetable intake. This implies that Workplace Design has an effect on the actual fruit and vegetable intake of white-collar employees in the German

manufacturing industry. This answers the research question 1, which asks which workplace characteristics are required to affect fruit and vegetable intake. Workplace Design is required to affect the fruit and vegetable intake.

The results imply further that Workplace Design is statistically significant only for G-Manager, when the employee hierarchy position is taken into consideration. Workplace Design remains the factor which makes the strongest statistically significant unique contribution to explaining the fruit and vegetable consumption, taking the employee hierarchy positions into consideration. The results still indicate further that the Workplace Design makes a small positive contribution to explaining the fruit and vegetable intake. This answers the research question 2, which asks whether there are any differences to be considered in terms of the employee hierarchy positions. Workplace Design is required only by specific employees.

These findings in terms of the research questions confirm hypothesis 3 of this research for those employees holding a G-Manager job role. The hypothesis 3 tested with the regression model is whether white-collar employees' fruit and vegetable intake is affected positively by the quality of Workplace Design. To understand the actual meaning of this accepted hypothesis, the research's practical meaning is taken into consideration.

When the employee hierarchy positions are ignored in terms of the workplace characteristics, the Workplace Design is important for all employee positions. This demonstrates that the Workplace Design might be of relevance for multiple employees at work. This could mean that employees do not require a differently formed Workplace Design based on their hierarchy position in order to affect their actual fruit and vegetable intake.

The findings may further indicate that the Workplace Design is relevant in this research study for employees as a whole because it is relevant for G-Manager, who represent the majority of survey participants in this research. The G-Manager group represents 225 responses out of the total N=452 being in the scope of discussion (see Table 4).

Considering the employee hierarchy position, only the hierarchy group of G-Manager remains, and Administrative Staff is not relevant anymore for the Workplace Design. In terms of practical contribution, this could mean that Workplace Design should be arranged only in terms of the barriers and needs of G-Manager, even if Workplace Design also makes a contribution towards

the fruit and vegetable intake across all employee hierarchy positions. The other employee groups may benefit from the interventions made for the G-Manager. This shows that Workplace Design is a complex workplace characteristic to manage.

The variable Workplace Design is found as the most relevant workplace characteristic identified in this research. This means that Workplace Design might be the best workplace characteristic to consider when an employer aims to affect their white-collar employees' intake of fruit and vegetables at work positively. The employees to consider specifically are the employees with a G-Manager job role. A reason why G-Manager report the Workplace Design as the most relevant workplace characteristic affecting their fruit and vegetable intake might be because of the high degree of time they spend in the office (De Cocker et al., 2015). Having a supportive and appropriate environment is seen as a condition required when a lot of time is spent in the work environment (Caruso et al., 2006).

Another perspective to be taken into consideration might be that G-Manager have a core accountability or influence in creating the conditions or boundaries of the Workplace Design, including the facilities, the conditions or the appearance of the workplace. The Administrative Staff does not typically have this accountability or influence (Mendis, 2016; Pescud et al., 2016). It might therefore be that G-Manager influence the creation of their Workplace Design in a way that they prefer, and therefore value it more.

The focus of the Administrative Staff might be on executing the job-related tasks, assuming that the Administrative Staff see their job as an obligation required to earn money (Watson and Korczynski, 2011). This might explain why Workplace Design does not show a statistically significant contribution for Administrative Staff. Workplace Design is defined in this research study as surroundings of the workplace environment. This might not be important if the Administrative Staff's motivation is towards the pure job execution. Encouraging fruit and vegetable consumption may be interpreted as a push to consume, while Administrative Staff is not interested in such fruit and vegetable-related employer care. They may not want to be affected by their employer.

Even if the actual effect size on fruit and vegetable consumption is identified as small, the Workplace Design is found as a workplace characteristic which gives the opportunity to influence employees in terms of their fruit and vegetable intake. A reason for the effect size given might

be the elements used to determine Workplace Design in this study. Elements such as noise, indoor climate or modern and ergonomic workplace might be experienced differently. As the discussion of the effectiveness of this research's findings (chapter 5.2.3) already indicated, such a variance in the human behaviour is not unusual. This research's philosophy already specified that the real world is experienced differently by different employees. Another reason for the small effect size might be that this research considered multiple workplace characteristics in parallel. As indicated in the literature review (p. 36), it seems that other research studies consider one or two workplace characteristics, while this research considered five workplace characteristics. This reason might be enhanced through the definition of Workplace Design. It might be that other elements of how the workplace is designed are more relevant for employees.

Interventions suggested in order to affect the intake of fruit and vegetables positively through Workplace Design might be reducing noise or giving more space. Survey participants indicated in the open-ended questions that sitting in an open-space office reduces their individual space and that the overall noise is sometimes high. It might be considered to create a clean desk policy and hold discussions in meeting rooms only. This may give more space and reduce noise. It is also recommended to ensure ergonomic seating. This is an element understood as Workplace Design and may also have further benefits for employees and organisations in terms of the wider employee health (Gilbert et al., 2015). A modern and encouraging design could also be considered to affect the employees' behaviour.

These findings extend the work of the WHO as presented by Burton (2010). This work points out that supportive work environments support or motivate the employees to live a healthy personal lifestyle. Such a supportive work environment includes furniture, air conditions or similar but is limited in a direct link between those conditions and the actual intake of the provided healthy food choices in the canteen. This research builds on the WHO position that workplace environment is a relevant factor to be proactively managed. The findings of this research demonstrate that employer efforts suggested by the WHO are positively correlated across all employee hierarchies, and support therewith the efforts of the WHO to achieve better workplace conditions in terms of health at work. The WHO report from Burton (2010) comments that there are various factors making a workplace healthy, and splits these into physical and psychosocial elements. The findings of this research support it might be necessary that different workplace characteristics be taken into consideration. Along with Workplace Design, other workplace characteristics are analysed. As mentioned at the beginning of the discussion, Social Climate and

Accessibility are identified as significant predictors of the intake of fruit and vegetable. This research also adds the consideration of different employee hierarchy positions, which is not taken into account in the report by the WHO.

The findings of this research also provide a contribution to existing literature in terms of employee behaviour. The work of Vischer and Wifi (2017) introduces the findings that employees need to feel safe at work, in a way that their health and well-being are not in danger. Their finding that the Workplace Design affects the employees' behaviour in terms of commitment or morale is supported with this research. Even though this research considers a different employee behaviour, the findings of this research and the findings of Vischer and Wifi (2017) have in common that the Workplace Design has a positive effect on the employees. The understanding of Workplace Design includes ergonomic workplaces or indoor climate and noise. These elements could affect the employees' health if they are inappropriate. The findings of the research support that the Workplace Design provides an opportunity to affect the employees' behaviour in specific activities such as the consumption of fruit and vegetables. The findings of this research develop further the existing knowledge in terms of the relevance of the surrounding factors of the adult's environment. The surrounding factors appear very often in the academic literature as an element in order to manage the employees' behaviour. (Lien, Lytle and Komro, 2002; Bogers et al., 2004). The finding in terms of the academic knowledge is seen in the fact that the Workplace Design is, in coexistence with other workplace characteristics, a predictor in the employee behaviour to consume fruit and vegetables, but it is not a strong predictor showing a core critical effect.

The findings of this research challenge the report by Gilbert et al. (2015) and may put their statements into a slightly different light. It is the understanding of this research that it is necessary to take the "whole" person into consideration, as Gilbert et al. (2015) state. This is a reason why this research considered multiple workplace characteristics, exploring their effect on the intake of fruit and vegetables. The statement from Gilbert et al. (2015) that the Workplace Design has the potential to reduce health costs is questionable. They made this statement for all employees and did not point out a need to consider specific employee groups. This research found that the effect of Workplace Design exists and therefore has the same understanding. But a detailed inspection has shown that only the G-Manager are affected by the Workplace Design. In terms of the statement by Gilbert et al. (2015), this means that Workplace Design has the potential to reduce health costs, but a generalisation without considering different employee groups may need reconsideration.

In order to allow practical actions, the presented recommendations can be used to identify opportunities within organisations to change the Workplace Design, aiming to achieve an effect on the employees' fruit and vegetable intake. It is recommended to include the employee in this process, as an expert on his/her job and workplace needs (Großmann and Laun, 2002). For organisations aiming to affect the fruit and vegetable intake of their employees, it means that the design of the workplace environment has the opportunity to be applicable for such a transformation. There are recommendations available for organisations in Germany to establish a modern and appropriate workplace (Deutsche Gesetzliche Unfallversicherung, 2015). This includes chairs, computer equipment, tables, noise or room climate conditions. Other research found similar correlations, such as Mendis (2016), who explored the relation between Workplace Design and job performance. In this work, it was the workplace layout, ventilation, lighting, establishment of equipment and thermal comfort that were considered. New chairs, different lighting systems or equipment preferred by employees can be considered to make a difference in the office. Complex changes such as installing a new ventilation system might not be a short-term intervention if there are rebuilding changes required. This leads to the deduction that organisations can arrange short term changes with effects on the employees' fruits and vegetable intake. On the other hand, mid- and long-term changes are also feasible to consider but may need more time to plan and execute in order to achieve an effect on the consumption of fruit and vegetables. The exact need for adjustments might depend on the specific employer's work condition and situation (Lohmann-Haislah, 2012). The connection between the workplace environment setup and the fruit and vegetable consumption is seen in the work of Burton (2010). In this report, it is stated that the consideration of physical workplace factors such as chairs or ventilation systems is needed to establish a healthy workplace environment.

5.2.5 Social Climate

In the understanding of this research, the Social Climate means that work is important, managers and employees value and support each other, as well as work together in an appropriate way. It also includes that employees and managers talk to and care about each other with respect to the intake of fruit and vegetables. The Social Climate is understood as the set of characteristics which are relatively stable and influence the employees' behaviour at work (Flarey, 1993). The meaning of Social Climate includes the organisational culture, in which people make decisions in terms of their fruit and vegetable intake. This includes, for instance, peer support, when employees talk to each other about the consumption of fruit and vegetables and encourage each other to eat more fruit and vegetables at work. This view is supported by the findings in the Australia-based

research of Hutchinson, Howlett and Wilson (2013). As independent variable in this research, the Social Climate is measured through the elements in the online questionnaire described as job relevance and success, the way team members work together and respect each other, the conditions of healthy eating, the employer's "taking care" attitude and the communication about it between co-workers at work.

The results demonstrate that the Social Climate, as defined previously, is the workplace characteristic in this research study which shows the second strongest statistically significant unique contribution to explaining the fruit and vegetable consumption, without taking the employee hierarchy positions into consideration.

The results indicate that the Social Climate makes a small positive contribution to explaining the fruit and vegetable intake. This implies that Social Climate has an effect on the actual fruit and vegetable intake of white-collar employees in the German manufacturing industry. This answers the research question 1, which asks which workplace characteristics are required to affect fruit and vegetable intake. Social Climate is required to affect the fruit and vegetable intake.

The results imply further that Social Climate is statistically significant only for G-Manager, when the employee hierarchy position is taken into consideration. Social Climate has the third strongest statistically significant unique contribution to explaining the fruit and vegetable consumption, when taking the employee hierarchy positions into consideration. The results still indicate that the Social Climate makes a small positive contribution to explaining the fruit and vegetable intake. This answers the research question 2, which asks whether there are any differences to be considered in terms of the employee hierarchy positions. Social Climate is required only by specific employees.

These findings in terms of the research questions confirm hypothesis 4 of this research for those employees holding a G-Manager job role. The hypothesis 4 tested with the regression model is that white-collar employees' fruit and vegetable intake is affected positively by the grade of Social Climate. To understand the actual meaning of this accepted hypothesis, the research's practical meaning is taken into consideration.

When the employee hierarchy positions are ignored in terms of the workplace characteristics, the Social Climate is important for all employee positions. This demonstrates that the Social

Climate might be of relevance for multiple employees at work. This finding is similar to the finding for the Workplace Design. This could mean that employees do not require a different Social Climate based on their hierarchy position in order to affect their actual fruit and vegetable intake. This makes sense, as the Social Climate is created through a wide range of employees jointly (Tsai, 2011; Hutchinson, Howlett and Wilson, 2013).

As for Workplace Design, the findings may indicate further that the Social Climate is relevant in this research study for employees as a whole because it is relevant for G-Manager, who represent the majority of survey participants in this research. The G-Manager group represents 225 responses out of the total N=452 in the scope of discussion (see Table 4).

Considering the employee hierarchy position, only the hierarchy group of G-Manager remains, and Administrative Staff is not relevant anymore for the Social Climate. From a contribution to practice perspective, this could mean that Social Climate should be created only based on the barriers and needs of G-Manager, even if Social Climate also makes a contribution to the fruit and vegetable intake across all employee hierarchy positions. The other employee groups may benefit from the interventions made for the G-Manager. Other employee groups might also be affected by the actual behaviour of the G-Manager through their leadership style, which is a core part of the Social Climate (Tsai, 2011). It shows that Social Climate is, like Workplace Design, a complex workplace characteristic to manage.

The variable Social Climate is found to be a relevant workplace characteristic identified in this research. This means that Social Climate might be, along with Workplace Design, an appropriate workplace characteristic to consider when an employer aims to affect their white-collar employees' intake of fruit and vegetables at work positively. The employees to consider specifically are the employees with a G-Manager job role. The same reason why G-Manager report the Workplace Design as relevant might be applicable for Social Climate. The time this group of employees spend in the office is typically higher than that of other employees such as the Administrative Staff (De Cocker et al., 2015). This may indicate a requirement for a supportive and appropriate atmosphere at work (Caruso et al., 2006).

Another perspective to be taken into consideration might be that G-Manager have a core stake in creating the conditions or boundaries of the social work climate, including the inner-organisational support and way of working together. The Administrative Staff does not typically

have influence in this respect (Ekvall and Ryhammar, 1998). It might therefore be that G-Manager behave in a way which influences or creates a Social Climate they prefer or feel comfortable with. This supports the assumption that G-Manager are employees who have the potential to influence the wider organisation and are also responsible for forming the social work climate, due to their leading responsibility within the organisation (Kelly, 2007). This includes the fact that the G-Manager act as role-models within the organisation (Weaver, Treviño and Agle, 2005).

The focus of the Administrative Staff might be on executing the job-related tasks, assuming that the Administrative Staff see their job as an obligation required to earn money (Watson and Korczynski, 2011). This might explain why Social Climate do not show a statistically significant contribution for Administrative Staff. Social Climate is defined in this research study as surroundings of the workplace environment. This might not be important if the Administrative Staff's motivation is towards the pure job execution. Encouraging the fruit and vegetables consumption may be interpreted as a push to consume, while Administrative Staff is not interested in such fruit and vegetable-related employer care. They may not want to be socially managed by their employer.

Even if the actual effect size on the fruit and vegetable consumption is identified as small, the Social Climate is found as a workplace characteristic which gives the opportunity to influence employees in terms of their fruit and vegetable intake. A reason for the effect size given for this research might be that employees experience similar conditions differently. How employees work and value each other, the feeling that the work is important and employees care for each other might be experienced differently. Similarly to the case of Workplace Design, the discussion of the effectiveness of this research's findings (chapter 5.2.3) already indicates that a variance in the human behaviour is not unusual. This research's philosophy already specified that the real world is experienced differently by the employees. Another reason for the small effect size might be that this research considered multiple workplace characteristics in parallel. This is similar to the variable Workplace Design. As indicated in the literature review (p. 36), it seems that other research studies consider one or two workplace characteristics, while this research considered five workplace characteristics. This reason might be enhanced through the definition of Social Climate. It might be that other elements of the employee interrelation are more relevant for employees.

Interventions suggested in order to affect the intake of fruit and vegetables positively through Social Climate might be training managers. Such training might include how to value employees and how to encourage and stimulate the appreciation of the importance of the job tasks as well as the peer-to-peer behaviour (Cooke and Meyer, 2007). Survey participants indicated in the open-ended questions that some policies in terms of the consumption of fruit and vegetables at the desk also exist. It might be therefore recommended to review existing policies and reconsider those that are not supportive to the Social Climate in respect to the intake of fruit and vegetables.

Another research shows that the organisational culture is positively correlated towards the behaviour of leaders (Tsai, 2011). This supports saying that a "walk the talk" attitude of leaders may have a positive effect on the organisational culture. The leaders of organisations aiming to affect the fruit and vegetable intake of employees at work may consider creating a good Social Climate, represented and formed through the actual behaviour towards the employees. The findings of this research support the discussion of Tsai (2011). G-Managers are affected the most in changes in the Social Climate in terms of the intake of fruit and vegetables, which underlines the "walk the talk" attitude.

Ekvall and Ryhammar (1998) explain in their work that the climate at work, which is created by the leadership style of the management, impacts the employees' productivity. This finding demonstrates two aspects which are relevant for this discussion. On the one hand, it shows the important role given to the managers and on the other hand, that the Social Climate can impact the employees' behaviour. The employees found to be affected are the G-Manager. The G-Manager group covers a wide range of employees from the Manager up to the Owner or Board Member. The Administrative Staff is not found to be impacted by the Social Climate.

A similar view is reported by Galer, Vriesendorp and Ellis (2005), stating that the Social Climate influences the employee behaviour at work. Their work looks at employee motivation and performance management. In its fundaments, their work is similar to this research as it explores how an employer can affect the employees' behaviour. In addition to this, Pescud et al. (2016) found that management support and a receptive culture (=Social Climate) were key for the implementation of a fruit box at work. The findings of this research build therewith on existing evidence that the behaviour in terms of the intake of fruit and vegetables of employees with a G-Manager role can be affected at work through the Social Climate. This goes along with the findings of the other studies.

The work of Hutchinson, Howlett and Wilson (2013) found that peer support at work has an increasing effect on the employees' fruit and vegetable intake. They mention that leading examples or verbal reminders can impact the consumption. Their findings are supported in the work of Pérez-Escamilla et al. (2008), who explored how peer education impacts nutritional behaviour. Hutchinson, Howlett and Wilson (2013) focus on Australia, while Pérez-Escamilla et al. (2008) consider Latinos. The employees' impression that their employer cares about their well-being is also discussed in the work of Vischer and Wifi (2017). This goes beyond the peer support and loops in the management support through a corporate culture of wellness. This research supports those findings and expands them to include the fact that not only the peer or management support are relevant. The Social Climate is a broader aspect than support and taking it into consideration may have a positive effect.

The work of Sorensen et al. (1999) may be put into a different light with the findings of this research. They found that the intake of fruit and vegetables increases by 7% through co-worker support of healthy eating. This included encouraging co-workers to eat vegetables or to bring fruits to work. The support of co-workers is part of the understanding of Social Climate in this research. This research does indeed confirm a positive effect of the Social Climate on the consumption of fruit and vegetables, but not for all employee hierarchy positions. As this research did not measure the exact fruit and vegetable intake, it is not possible to justify whether a 7% increase is still valid today and for the target group of this research. However, the work of Sorensen et al. (1999) may be challenged in terms of the generalisation across all employee hierarchy positions. Social Support is found as statistically predictive only for certain employees, which are classified in this research as G-Manager. The difference between the work of Sorensen et al. (1999) and this research is the year of the study (1999 vs. 2019). So, it could be that the role of manager has changed over this period of time. In addition, this research considered Social Climate in a coexistence with other workplace characteristics, and Social Climate as an umbrella for various elements, including co-worker support. Sorensen et al. (1999) considered co-worker support specifically and did not take other workplace characteristics into account. This could potentially affect the input from the survey participants of this research study.

In order to affect the fruit and vegetable intake at work through the Social Climate, a recommended practical action is seen in training the organisational leadership team to deliver social support in the organisation and form therewith the Social Climate. Gaines and Turner (2009) see the social support, which is in the understanding of this research part of the Social

Climate, as an element of various constructs such as environment construct or reinforcement construct. They understand the environment construct as the supportive environment, such as community. The community is seen as the workplace and the peers or colleagues. The reinforcement construct covers the social support system or the changes in the environment. Training may include information about fruit and vegetable intake in order to allow an appropriate peer support (Buller et al., 1999), knowledge about how to treat employees in the office to form a positive atmosphere (Ekvall and Ryhammar, 1998; Allodi, 2010) or setting social behaviour values to ensure that a common understanding of the organisational attitude exists (Marinova, Cao and Park, 2018).

In this relation, Gaines and Turner (2009, p.60) state that "social support systems can positively reinforce" the fruit and vegetable intake. The interaction with peers is also an element of the Social Climate (Story et al., 2008) and impacts the actual interest in fruit and vegetables intake. It might be of interest to explore in another research which effect the Workplace Design has on the Social Climate to verify correlations. This is not the aim of this research, but the interrelation and dependency are recognised.

Affecting the Social Climate means, in the understanding of this research, driving interventions in the organisational culture. This culture is typically set by the Owner, Board Members or Similar, who form the leadership team and leadership style in organisations (Ekvall and Ryhammar, 1998). The Owner, Board Members or Similar employees therefore have a key responsibility in forming the Social Climate, even though, for this employee hierarchy position, a specific predictor in terms of the intake of fruit and vegetables is not identified.

5.2.6 Accessibility

In the understanding of this research, Accessibility means that the right and affordable fruit and vegetable option for each individual employee is accessible at the right time, with the right quality and appropriately prepared for consumption. This includes having appropriate equipment accessible with which to prepare or consume the fruit and vegetables as well as a place where fruit and vegetables are prepared. Accessibility is measured through elements described as the opportunity to prepare fruit and vegetables at work. This includes the quality of the fruit and vegetables in the canteen, the access to locations where employees can prepare fruit and vegetables as well as their quality, the range of fruit and vegetables that can be accessed and the

costs. These factors are taken into consideration in order to understand the actual Accessibility to fruit and vegetables that employees experience at their place of work.

The data suggests that the Accessibility, as defined previously, is not a statistically significant unique predictor for the fruit and vegetable intake of employees in this research study, without taking the employee hierarchy positions into consideration. This implies that Accessibility does not make a contribution towards the fruit and vegetable intake. This means for a business organisation that this workplace characteristic might not be a workplace characteristic to be taken into consideration if it is aimed to affect the fruit and vegetable intake.

Accessibility appears not to be relevant to affecting the employees' fruit and vegetable consumption at work and it could be argued that Accessibility is therefore not required as a workplace characteristic. This answers the research question 1, asking which workplace characteristics are required to affect fruit and vegetable intake. A closer look at the standard coefficients shows which contribution Accessibility makes to the explanation of the fruit and vegetable intake at work. A different perspective is added towards this answer to research question 2.

Taking the breakdown of Accessibility in terms of the employee hierarchy positions into consideration, the results show additional insights. The findings indicate that Accessibility makes the second strongest statistically significant unique contribution to explaining the fruit and vegetable consumption, taking the employee hierarchy positions into consideration. This unique contribution is found for the Administrative Staff. This answers the research question 2, which asks whether there are any differences to be considered in terms of the employee hierarchy positions. Accessibility is required only by specific employees.

The findings which answer research question 2 change the perspective indicated by the answers to research question 1. Accessibility, which initially is not seen as being required to affect the fruit and vegetable intake, becomes required when considering the actual employee hierarchy position.

The results indicate further that the Accessibility makes a small negative contribution to explaining the fruit and vegetable intake. This implies that Accessibility has an affect on the

actual fruit and vegetable intake of white-collar employees in the German manufacturing industry, but not in terms of an increase of the actual fruit and vegetable intake.

These findings for the research questions reject hypothesis 2 of this research for those employees holding an Administrative Staff job role. The hypothesis 2 tested with the regression model is that white-collar employees' fruit and vegetable intake is affected positively by Accessibility. To understand the actual meaning of this rejected hypothesis, the research's practical meaning is taken into consideration.

As illustrated previously, when the employee hierarchy positions are ignored in terms of the workplace characteristics, Accessibility is not required to be considered as affecting the fruit and vegetable intake. This demonstrates that Accessibility might not be of relevance for multiple employees at work. This could mean that none of the white-collar employees require Accessibility, independently of their hierarchy position. This outcome is different to that of Workplace Design and Social Climate. Accessibility is a statistical predictor only for a single employee group when the hierarchy positions are considered. Workplace Design and Social Climate are statistical predictors across all employee hierarchy positions and, when the hierarchy position is taken into account, only single employee groups remain statistically significant. It is argued previously that Workplace Design and Social Climate might be relevant for employees as a whole because these workplace characteristics are identified for G-Manager, who represent the majority of the survey participants. In turn, the findings of Accessibility are not relevant for employees as a whole because the findings are for Administrative Staff, who do not represent the majority of the survey participants of this study.

Accessibility shows a small negative standard coefficient (Beta) for the Administrative Staff. This means that Accessibility is significantly inversely associated with the intake of fruit and vegetables. The increase of Accessibility leads to a decrease in the fruit and vegetable intake at work of white-collar employees with an Administrative Staff job role. The Administrative Staff might show such negative contribution to explaining the fruit and vegetable intake because other factors, such as salary, are more relevant to them compared to other workplace characteristics which may affect the fruit and vegetable intake. The Administrative Staff is often paid less and do not spend as large an amount of time in the office, compared to employees holding a manager position (Shin, 2014; Kurschner, 2019). The variable Accessibility is defined in this research as a workplace characteristic which considers timing, quality and appropriate preparation.

Administrative Staff might not be interested in these driving forces, assuming that the Administrative Staff see their job as an obligation required to earn money. The focus of the Administrative Staff might be on executing the job-related tasks (Watson and Korczynski, 2011).

The negative beta of Accessibility indicates that the management of this variable may lead to an opposite effect to the considered objective of increasing the fruit and vegetable intake. This means that the negative contribution of Accessibility to explaining the fruit and vegetable intake at work for Administrative Staff indicates that initiating interventions towards the Accessibility of fruit and vegetables would lead to a reduced actual fruit and vegetable intake. The negative contribution directs the argumentation in a way that the combination of Accessibility and the employee hierarchy position should not be proactively managed. From a contribution to practice perspective, this could mean that there is a risk that an activity might lead to a counterproductive impact on the employees' fruit and vegetable intake (Baguley, 2010). Organisations aiming to affect the actual fruit and vegetable intake of their employees positively might need to be specific in interventions. The reason is that managing Accessibility may negatively impact the Administrative Staff in terms of their fruit and vegetable intake.

The findings of this research also provide a contribution to existing literature in the sense of the employee behaviour. Accessibility shows in this research a very small relevance towards the employees' actual consumption of fruit and vegetables at work. These findings do not fit with the findings of other research in the academic literature in terms of fruit and vegetable consumption. The need to have fruit and vegetables ready to consume is found in the research of Mittmann et al. (2014) in the context of children in Germany. This is supported by Lacaille et al. (2011) stating that students do not have access to appropriate fruit and vegetable conditions like a freezer or food storages. The academic literature often discusses Accessibility as a key element when the consumption of fruit and vegetables is explored and discussed (Gaines and Turner, 2009; Bandoni et al., 2010; Backman, Carman and Aldana, 2014). This is supported in the work of Menozzi and Mora (2012) stating that the intention to prepare fruit and vegetables leads actually to the consuming behaviour. Menozzi, Sogari and Mora (2015) found that to affect the vegetable intake of young adults in Italy, a tailored and targeted intervention approach is recommended.

A key differentiator between this research and the existing academic literature is the target groups. Often, school children (Davis Hearn et al., 1998) or students (AL-Otaibi, 2014; Asada et

al., 2017) or young adults (Menozzi and Mora, 2012; Menozzi, Sogari and Mora, 2015) are addressed. The focus of this research is on white-collar employees in the German manufacturing industry. This could mean that there are different attitudes causing the actual behaviour in terms of the fruit and vegetable consumption. A reason why it is different for white-collar employees might be the capability to make their own decision on accessing fruits and vegetables. Children, students or young adults need to be supported in accessing fruit and vegetables such as in the preparation, in the right time and quality as well as in an affordable way. This finding supports this point of discussion that tailored considerations of different employee and industry groups might be required.

A key question in terms of the findings of this research is why Accessibility shows in this research differences in the statistical significance compared to other available academic work. A reason for this might be that most of the reviewed academic literature has a geographic focus outside of Germany, which is the geographic area explored in this research. Micha et al. (2015) found that the intake of food varies across countries worldwide but do not indicate more details helping to understand why Accessibility is different in Germany. More research is needed to explore and understand this difference in terms of Accessibility.

Another reason to take into consideration in understanding why Accessibility performs differently might be that other workplace characteristics are taken into account. To the knowledge of this study, there are no other research studies considering multiple psychosocial and physical workplace characteristics at the same time when exploring the effect on the intake of fruit and vegetables. It might be that Accessibility does not receive as much focus from the survey participants as in other surveys exploring only Accessibility because other workplace characteristics are measured at the same time (Baranowski et al., 1993; Davis Hearn et al., 1998; Baranowski, Cullen and Baranowski, 1999). The coexistence with other workplace characteristics probably has an impact. For instance, Bandoni, Sarno and Jaime (2010) or Sacks, Yi and Nonas (2015) focus on Accessibility only. Neither of these two studies bring in other factors in the way that this study considers the workplace characteristics Workplace Design, Social Climate and Communication and Availability in coexistence with Accessibility. The bivariate correlation matrix in Table 11 shows that Accessibility has a small positive correlation to all other workplace characteristics but Social Climate. This supports saying that an interrelation and a coexistence between the workplace characteristics exists.

Another research was identified in the literature review process which also showed that a change in Accessibility of fruit and vegetables is not achieved through an intervention. The work of Najimi and Ghaffari (2013) uses the Social Cognitive Theory to assess interventions. There are no further key commonalities between their study and this research but the consideration of a social and interpersonal context. It is important to note that this research study does not provide a unique finding in terms of Accessibility in relation to the intake of fruit and vegetables. Najimi and Ghaffari (2013) indicate that the regional scope of their work is a driver for a different finding on the Accessibility of fruit and vegetables.

The findings in the qualitative data on the Hygienic Conditions may indicate a further argument as to why Accessibility is a negative predictor for the intake of fruit and vegetables. Accessibility is understood in this research study as the situation in which fruit and vegetables are accessible at the right time, with the right quality and appropriately prepared as well as having the required equipment available. The definition does not include the Hygienic Conditions of the equipment used, or that the place where fruit and vegetables are prepared has appropriate Hygienic Conditions. As the survey participants indicate that the Hygienic Conditions are not good, it could be that this situation holds employees back from consuming accessible fruit and vegetables, or preparing such fruit and vegetables as they fear for their health when using equipment in poor Hygienic Conditions (Vischer and Wifi, 2017).

In order to allow practical recommended actions, Accessibility needs specific attention when being managed in order to avoid the risk of a negative impact. When Accessibility is understood as the employee's attitude to preparing the available fruit and vegetables for intake (Lien, Lytle and Komro, 2002; Shaikh et al., 2008; Sacks, Yi and Nonas, 2015), the findings of this research recommend considering that employees probably need autonomy in their fruit and vegetable preparation at work (Oldham and Rotchford, 1983). Interventions in the sense of Accessibility affect the Administrative Staff, but it needs to be taken into account that the explored contribution of Accessibility for the fruit and vegetable intake is negative. This means, from a practical perspective, that organisations need to step back and avoid executing proactive interventions to affect the fruit and vegetable intake.

5.2.7 Key Contrary Findings

Availability is very closely related to Accessibility, as Perry et al. (2004) describe in their research, or Davis Hearn et al. (1998) or (Alinia et al., 2011) demonstrate. In the understanding of this

research, Availability means that a range of fruit and vegetables are present for consumption in the canteen, during meetings or at other locations in the office. Fruit and vegetables which are not available cannot be consumed. As an independent variable, Availability is measured through the elements described as the acceptance of the inhouse canteen if existing, the offer of fruit and vegetables in the canteen, in meetings or other places as well as the variety of choice. These factors are taken into consideration in order to understand the actual fruit and vegetable availability employees experience at their place of work.

In the academic literature, there is a common and a wider understanding that the Availability of fruit and vegetables is an important factor in terms of their consumption (Gaines and Turner, 2009; Bandoni et al., 2010; Backman, Carman and Aldana, 2014). Availability is understood in the existing academic literature as having a significant positively correlated effect or influence on the actual intake of fruit and vegetables (Menozzi and Mora, 2012; Aggarwal et al., 2014). This is, for instance, explored for school children (Heim, Stang and Ireland, 2009) but also for employees at work (Bandoni et al., 2010; Backman, Carman and Aldana, 2014). Alinia et al. (2011) found that freely available fruits at work can improve the daily fruit consumption over several months. Backman et al. (2011) state that fresh fruit deliveries can increase the consumption of fruit at work.

Availability is explored contrary to the present knowledge in the academic literature. The results indicate that the variable Availability is not statistically significant for the framework of this research. Taking the different workplace characteristics of each employee hierarchy position into account, none of the employee hierarchy positions claim Availability as a predicting workplace characteristic towards the fruit and vegetable intake. This is a key contrary finding compared to the knowledge identified in the literature review and shall therefore be briefly discussed.

With the finding of this research' regression model, the hypothesis 1 is rejected. The hypothesis 1 was that white-collar employees' fruit and vegetable intake is affected positively by Availability. A reason that the findings of this research might be different compared to the academic literature is seen in the geographic and employee scope given to this research. This research considers white-collar employees in the German manufacturing industry. The available academic literature used as knowledge reference often considers school children, students, young adults or employees in other regions, such as the US (Backman, Carman and Aldana, 2014), Brazil (Bandoni et al., 2010) or Italy (Menozzi and Mora, 2012). It might be that the autonomy to consume fruit

and vegetables is higher for adults compared to children or for workers in Germany compared to workers in other regions. The work of Stevenson et al. (2007), aiming to identify the barriers to healthy eating, considers autonomy in their discussion. This indicates that autonomy may impact the actual behaviour in terms of the intake of fruit and vegetables. This may require more detailed research. Another reason for the contrary findings might be that Availability is often explored on its own or in combination with Accessibility in the academic literature. There was no research found which explored Availability considering other fruit and vegetable impacting factors in coexistence with Availability. This research considers, along with Availability and Accessibility, also Workplace Design, Social Climate and Communication. It might be that the target group of this research does not value Availability as much as in other research studies when other factors are also considered. This could mean that Availability is only relevant when considered on its own, but it loses importance when other factors are considered. The bivariate correlation matrix in Table 11 shows that Availability is between small and medium positively correlated to all other workplace characteristics. This supports saying that an interrelation and a coexistence between the workplace characteristics may exist.

To avoid doubt, it should be mentioned that Hypothesis 5 is also rejected based on the findings of this research's regression model. The results do not indicate a statistical significance for the variable Communication. The hypothesis 5 tested whether white-collar employees' fruit and vegetable intake is affected positively by the level of Communication. A reason why Communication is not explored as statistically significant might be because of the elements used in this research to measure Communication. It might also be contrary to other academic literature because it was separated from the Social Climate. Traditional health Communication efforts might not be effective (de Bruijn, 2010) as most organisations already maintain regular employee Communication (Tsai, 2011). Communication is not seen as a key contrary finding compared to the knowledge identified in the literature review and is therefore not discussed further.

5.3 Employee Barriers and Needs

The online survey of this research asked all participants to provide answers to open-ended questions in order to explore existing barriers or additional needs in the existing workplace environments which affect the actual fruit and vegetable intake at work. These qualitative data are used to gain additional insights into the quantitative data-based understanding of workplace characteristics.

The survey questions were answered from between 40 and 178 survey participants, depending on the question asked (see Appendix 13). As these qualitative questions were not mandatory to answer, these questions were answered selectively by the survey participants. In total, 452 survey participants joined the online questionnaire and provided data for the quantitative section of the survey.

The qualitative questions support the research purpose of understanding the workplace characteristics affecting the fruit and vegetable intake. The qualitative data reduce the risk of missing a critical workplace characteristic required to affect the fruit and vegetable intake, as additional workplace characteristics required by employees can thus be included in this discussion.

In addition to the preselected workplace characteristics discussed earlier, the qualitative data indicate that Free F&V Products and Hygienic Conditions are additional workplace characteristics employees may need for their fruit and vegetables intake at work.

Providing free fruit and vegetables is discussed in the literature and is not new knowledge. This finding supports the work of Hutchinson, Howlett and Wilson (2013). They found that free fruit and vegetables at work have a positive effect on its consumption. Similar findings are provided by Alinia et al. (2011) and Lake et al. (2016). The positive effect of free fruit and vegetables towards the consumption is provided in the academic literature. This research does not evaluate quantitatively whether such an effect is also reasonable for the white-collar employees in the German manufacturing industry. The literature review in terms of Accessibility includes the element of costs. The variable Accessibility in this research means that fruit and vegetables are affordable. This does not mean that the fruit and vegetables are free. The additional workplace characteristic is not covered within the variable Accessibility in this research.

The barrier or need expressed by Free F&V Products as a workplace characteristic may indicate that costs play a relevant role. This finding offers employers aiming to affect the actual fruit and vegetable intake of their white-collar employees an opportunity to make a change. Making fruits and vegetables accessible for free at worksites is not a difficult process in today's times. Service providers such as fruiton (fruiton GmbH, 2020) deliver fruit packages to the office on a subscription basis. Employers could run a test or pilot to find out if their employees accept the

offer. This finding also provides argumentation to explore Free F&V products in the German manufacturing industry for white-collar employees in more detail.

The barrier or need of the Hygienic Conditions is seen as new knowledge explored with this research study. This element was not preidentified during the literature review process. There was no academic literature found discussing or evaluating the Hygienic Conditions in terms of the fruit and vegetable intake. It could be argued that the Hygienic Conditions should be taken into consideration as part of the Workplace Design, as this workplace characteristic covers elements such as furniture, room conditions or materials in the workplace (Burton, 2010). The definition of Workplace Design for this research does not consider hygienic conditions.

The detailed feedback of the answers provided through the qualitative questions indicates that employees sense that a well maintained, clean and tidy fridge, for instance, is needed to store fruit and vegetables brought to work. If employees feel that they have no options to store or prepare their own fruit and vegetables hygienically and appropriately at work, this circumstance might be considered as a barrier to fruit and vegetable consumption at work. Bad Hygienic Conditions may have an impact on the employees' health, or employees may fear that their fruit and vegetables brought to the office cannot be stored, prepared or consumed in hygienically appropriate conditions, which impacts their health. These thoughts are supported by the work of Vischer and Wifi (2017), who found that employees want to be sure that their health and well-being is not in danger.

From a contribution to practice perspective, this research's finding indicates that employers aiming to affect the actual fruit and vegetable intake of their white-collar employees should ensure appropriate Hygienic Conditions. As the qualitative data show, this may include providing tools such as a dishwasher or hiring a service partner who cleans the kitchen or equipment required to consume fruit and vegetables. In addition, keeping Hygienic Conditions continuously ensured includes employee behaviour. They need to clean places used, put equipment into a dishwasher and leave a place in an appropriate condition. This is seen as being in a limited control of the employer and brings in some self-accountability of the employees.

It should be highlighted that the information provided by the survey participants also shows that the only employee hierarchy position not indicating Hygienic Conditions as a barrier is the group of Owner, Board Member or similar. The work of Kurschner (2019) indicates that differences in

respect to workplace characteristics exist based on the employee hierarchy position. This may support the finding of this research that Hygienic Conditions are probably not a concern for all employee groups. A reason might be that Owner, Board Member or Similar are not using a place to prepare fruit and vegetables as often, or that they have their own places which are used by less people. This finding shows perspectives of an additional workplace characteristic which is appropriate to consider when aiming to affect the fruit and vegetable intake.

The evaluation of the qualitative data shows further that the organisational position is a critical element when gaining feedback on the barriers and needs classified as Free F&V Products and Hygienic Conditions. The two lowest organisational positions Administrative Staff and Manager provide the most responses. In this respect, it needs to be mentioned that these two groups also represent the majority of the overall survey participants, as Table 17 shows. It might be that employees in higher organisational positions define, form and approve of the organisational environment (Gill, 2003) and do not see or feel such barriers and needs. It might also be that differences in the formed workplace characteristics depending on employee groups exist, which impacts the actual experienced barriers or needs (Kurschner, 2019). It might also be that survey participants with a higher organisational position had a restriction in time available to answer the qualitative questions. This will be addressed further in the research limitations. Furthermore, this supports considering the breakdown along the employee hierarchy positions, and for organisations considering affecting the fruit and vegetable intake to plan multiple interventions instead of stand-alone solutions.

The qualitative data shows that the higher the actual fruit and vegetable intake of employees is, the more additional feedback on the barriers or needs Free F&V Products and Hygienic Conditions is provided. This may allow to state that the more employees engage with fruit and vegetables, the more requirements they set. In addition, younger people and females tend to be more concerned about the additional barriers or needs of Free F&V Products and Hygienic Conditions. Knowing the age or the gender of the employees pointing out barriers or needs helps organisations to become better and indicates the need to listen to such employees. The organisational culture is already considered in this research through the workplace characteristic Social Climate, which shows a positive predictive relation towards the fruit and vegetable intake.

In order to allow practical recommended actions, employers may need to ensure that existing facilities are clean and have good Hygienic Conditions as well as offering from time to time free

fruits and vegetables. Even for small budget organisations, there might be ways to take this into consideration.

5.4 Interrelations of Workplace Characteristics

Discussing the workplace characteristics required to affect employees' actual fruit and vegetables consumption, it needs to be taken into account that stand-alone solutions may have a reduced impacting effect. The discussion is considered under the perspective of providing practical recommended actions, which means there might be a need to consider combined interventions in the preselected workplace characteristics Workplace Design and Social Climate as well as the explored workplace characteristics Free F&V and Hygienic Conditions.

This is based on the findings presented by Gaines and Turner (2009). Their work identifies effective factors which lead to an improved consumption of fruit and vegetables among children. Gaines and Turner (2009, p. 60) use the Social Cognitive Theory to understand different areas, including the environmental construct, and conclude that "multi-component interventions have been modestly successful in increasing FV intake among children in the United States". They formed an area called "environment construct". This is understood as a supportive environment for the intake of fruit and vegetables, like a canteen. The second term they formed is "self-control" and means taste testing, preferences, cooking or preparation skills. Gaines and Turner (2009, p. 59) state that "small, sustainable changes in the cafeteria, such as increasing attractiveness or altering marketing" can lead to positive effects on the children's' fruit and vegetable intake. A similar approach is recommended by Perry et al., (2004, p. 75), who state that "a multicomponent approach to increasing fruit and vegetable intake is recommended rather than solely relying on changes in" one single environmental factor, which for their research is the school cafeteria.

In the literature review, the discussion about the "caring boss" is introduced. It is a key element in order to affect the fruit and vegetable intake of employees at work. This notion is a good example in terms of the interpersonal relationship context. Organisations which care about their employees' well-being show an easier implementation and a better accepted fruit and vegetable consumption at work (Pescud et al., 2016).

A caring boss may have the motivation to improve the workplace characteristics required as needed, instead of considering independent changes. This research study considered multiple workplace characteristics in its approach and, in making practical recommendations, follows the

understanding of Gaines and Turner (2009). As Workplace Design and Social Climate are found as positive predictors of the intake of fruit and vegetables in parallel, it is recommended to execute interventions in both workplace characteristics at the same time. This may have a higher chance of success in affecting the actual fruit and vegetable intake. This might be enhanced through assuring appropriate Hygienic Conditions as well as offering Free F&V Products from time to time.

The bivariate correlation matrix in Table 11 shows that a small positive correlation between the variable Workplace Design and the variable Social Climate exists. This supports saying that an interrelation between these workplace characteristics exists. This is further supported by the findings of the qualitative data. The survey participants indicate that space is a barrier or a need in terms of the consumption of fruit and vegetables. Space is a part of the Workplace Design, but the survey participants indicated in the open-ended questions that space is also a "sense of well-being" in the office. This is in line with the work on the "the caring boss" (Pescud et al., 2016) and the work of Vischer and Wifi (2017), who state that employees do not want to feel that their well-being is in danger. This is an element of the Social Climate variable in this research. This shows the interrelation between this research's variables Workplace Design and Social Climate.

5.5 Closing Research Gap

Organisations aiming to affect the employees' fruit and vegetable consumption at work can achieve such an effect through interventions in workplace characteristics. The workplace characteristics explored in this research may have less of an impact than other workplace characteristics which are not explored in this research.

This research found that Workplace Design and Social Climate are required workplace characteristics which only positively affect the actual consumption of fruit and vegetables of employees in a manager job role. Accessibility is a workplace characteristic identified as negatively affecting fruit and vegetable intake, but only for Administrative Staff. In addition, Free F&V and Hygienic Conditions are identified as barriers or needs holding employees back from consuming fruit and vegetables at work. The barrier of Hygienic Conditions is not indicated for employees in an Owner, Board Member or Similar position. This closes the research gap in terms of the need to understand which workplace characteristics are required as well as whether there are differences to be taken into consideration in terms of employee groups.

The findings of this study which close this research gap recommend the management of the workplace characteristics defined as Workplace Design and Social Climate in order to affect the employees' fruit and vegetable intake positively. It is further recommended to take Free F&V and Hygienic Conditions into consideration for this process. The understanding of this research is that these recommendations lead to a positive effect on the intake of fruit and vegetables.

Increasing the fruit and vegetable intake through managing the workplace characteristics Workplace Design and Social Climate bears the opportunity to reduce costs occurring through presenteeism. The findings of the research are therefore an addition to the work of Merrill et al. (2012). They found that the consumption of fruit and vegetables can affect presenteeism. Their work left open how fruit and vegetable consumption can be affected in order to reduce the cost of 2,399 euro per employee and year occurring due to presenteeism (Maar and Fricker, 2011). This needs to be seen under the umbrella of Corporate Social Responsibility (Jain, Leka and Zwetsloot, 2011), as changes in the workplace characteristics may have positive impacts on the financial perspective through cost improvements as well as on the social perspective through the engagement with the employees (Burton et al., 2017). This is supported by the work of Baicker, Cutler and Song (2010), who found that each investment into wellness programmes at work can lead to a return on investment. The difference is that their work focuses on absenteeism, while this research considers presenteeism. This research also has a specific view on the fruit and vegetable consumption instead of considering wider wellness programmes.

An additional learning from this research is also the identification of workplace characteristics which appear not to be relevant for white-collar employees in the German manufacturing industry. These are Availability and Communication.

The findings closing the research gap as well as the additional learning are studied under the umbrella of a coexistence with other workplace characteristics. To the knowledge of this study, there are no other research studies exploring multiple workplace characteristics affecting the intake of fruit and vegetables. This is also seen as new academic knowledge. It contributes to the academic knowledge that exploring multiple workplace characteristics in terms of fruit and vegetable intake may differ from findings which focus on a single workplace characteristic. Organisations may need to consider the effect of interrelations between workplace characteristics and the significance of coexistence. This adds further information to the academic knowledge and offers further opportunities for research.

5.6 Limitations

In this section, the limitations of this thesis are outlined. The limitations are related to choices made during the research process or based on structural circumstances.

Research Approach

The qualitative data collected through the mandatory questions may limit the research. The decision to make the qualitative questions non-mandatory was made in order to reduce the time required to complete the questionnaire. The aim was to assure a maximum of survey participants completing the survey. The main purpose of the study is based on the quantitative data. The qualitative data are used for additional insights into the managerial implications. The large sample size increases the likelihood of additional qualitative data.

The preselected workplace characteristics used for this research were identified through the structured literature review process. This may limit this research, as these workplace characteristics do not necessarily cover all elements and variants of the actual workplace environments. The related impact is minimised by asking the survey participants whether there are any other hurdles or barriers holding them back from consuming fruit and vegetables at work.

The choice of the snowball sampling approach may limit this research in terms of allowing the generalisation of these findings and recommendations. The data explored may not be from an exact representative group of white-collar employees in the manufacturing industry. To minimise this effect, a wide range of target companies were contacted, and white-collar employees were invited directly. The large sample size also supports the dilution of this effect. The data collected were therefore compared against a typical white-collar employee structure distribution considering hierarchy positions and education.

Missing Values

The first answers of the online questionnaire showed a mistake in the setting of the answer structure for question 11 (Do you have access to a canteen or similar when you are working?). The online questionnaire offered a functionality to skip answers following a rule. This rule was set wrongly for this question. Participants who answered the question 11 with fully agree, agree, partly agree/partly disagree or rather disagree did not see question 18 (How would you assess your acceptance of the canteen or similar as a place to eat?), question 19 (How would you assess the fruit and vegetable offering in the canteen or similar?) and question 23 (How do you assess

the quality of the canteen's fruit and vegetable offering?). This mistake was corrected while the questionnaire was live. 40 survey participants were affected, of which 38 couldn't answer question 18, 19 and 23 when they stated a canteen was accessible. These 3 questions are related only to the workplace characteristic "Availability". This might impact this research's findings on "Availability". The large sample size reduced the actual effect of this limitation.

Differences in Population

In this research, only white-collar employees are considered. The WHO (Agudo, 2005) states in a report that different populations show different preferences in terms of the consumption of food. This may include differences in the cultural backgrounds. The questionnaire used for the analysis of this research did not ask for any cultural or similar backgrounds. In addition to workplace characteristics, different cultures or other aspects such as religion may impact the actual fruit and vegetables intake of the survey participants. The chosen time of the year, the large sample size and the regional focus on Germany lessen the impact. The time of the year is typically not a season of any dramatic cultural impacts, such as Ramadan. The regional focus assures a harmonized population.

The Spread of the Collected Data

At the time when the survey was published, the researcher was employed at a family-owned company. The employer supported this research project and shared the questionnaire link with all employees at the headquarters office. The survey does not ask for names but for an email-address in order to allow the survey participant to participate in a draw as well as to receive a copy of the approved thesis. All email-address are separated from the data before the data evaluation. During this process, it was noticed that 46 of the email addresses end with the domain of the researcher's employer. It is also recognised that on the day HR sent out the invite to join the survey 186 survey questionnaires were completed. On the day of the invite reminder 53 survey questionnaires were completed. It could be, therefore, that a certain amount of data is based on the feedback of a single company. The overall sample size with N=452 reduces the impact and the distribution of white-collar employees considering hierarchy positions and education is used to verify the actual spread of data.

The Choice of the Annual Time

The questionnaire was launched in February 2019 and participants answered the questionnaire between 19/02/2019 and 03/05/2019. This timeline of 3 months is a time in the year when in

Germany, typically the available fruit and vegetables change and increase over time, especially when going from late wintertime into early springtime. This may influence the decisions which the survey participants made indicating their actual fruit and vegetable intake. The impact on the findings of the research is seen as low as the focus of the research is to understand the workplace characteristics.

Socio-Economic Status

Anderson and Miller (2003) found that the socio-economic status impacts the endowments of human capital, which means that the socio-economic status is related to the organisational hierarchy position held by the different employees. The socio-economic status is not considered as a variable within the questionnaire, and this study cannot verify whether the socio-economic status is related to the employee hierarchy position and the workplace characteristics required to affect the actual fruit and vegetable intake. Recommendations made because of the employee hierarchy position are detached from any socio-economic position. The socio-economic status may influence the actual consuming behaviour because of income or education. This may impact the findings of this research, as the variable Accessibility in this research considers affordable fruit and vegetables in its definition. It may also impact the findings in terms of the Social Climate, which considers in its definition how employees value each other and the perceived importance of the job. Education may play a role in how employees value each other or how important they feel their job is.

5.7 Future Research

In this section, the recommended future research based on this research is outlined. The future research indications may provide additional contribution to the consumption of fruit and vegetables at work in order to reduce cost impacts through presenteeism.

Workplace Design and Social Climate

This research explores the Workplace Design as a workplace characteristic affecting the employees' intake of fruit and vegetables. The need to provide appropriate office equipment, office surroundings and a modern workplace atmosphere in Germany is reported in different papers and publications (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, 2010). Workplace Design is not broken down into different design elements such as furniture, air climate or space. In some organisations, different employee hierarchy positions work in different office locations or places, probably with different Workplace Designs. This could allow an organisation which is

aiming to affect the fruit and vegetables intake to be specific in interventions towards the Workplace Design for different office locations or employee groups. In this research, Workplace Design is considered as a single workplace characteristic across all organisational locations. It is not separated between different offices or workspace areas. It is recommended that future research explore which elements of the Workplace Design require an intervention or whether some elements of the Workplace Design are more relevant than others.

Similarly, it needs to be considered that a Social Climate is probably given for a full organisation and not for specific employee groups (Flarey, 1993; Ekvall and Ryhammar, 1998; Allodi, 2010). Whether creating the Social Climate based on the barriers and needs of a specific employee group positively or negatively affects other employee groups might also require future research. Future research might also be needed to explore the drivers of health costs which can be affected through the design of the workplace.

The Choice of not Separating Fruit and Vegetables

This thesis does not separate the consumption of fruit and vegetables into the different types of fruits and the different types of vegetables. Krebs-Smith et al. (1995) state in their work that the variety and the taste of different fruit and vegetables might be an important element. The decision not to separate between fruit and vegetables ensures a focus on the research purpose exploring the workplace conditions required. The habits of the employees in terms of the wide range of available fruit and vegetables and the behaviour or desire of employees for fruit and vegetables is not in the scope of this research. Separating between fruit and vegetables may bear the risk of losing the focus of this research which aims to understand the workplace characteristics. This approach is supported for instance by the work of Rueff and Logomarsino (2016). They explored ways to increase the fruit and vegetable intake of blue-collar employees in the US through worksite health-promotion interventions. Future research may focus on exploring the impact of different workplace characteristics on the intake of fruits and vegetables separately.

Digital Transformation

The workplace characteristics of the future (Heinrichs et al., 2016) might change and the digital transformation therefore probably has an effect on the design of the workplace characteristics. As the discussion indicates, the considered workplace characteristics show a limited effect on the employees' actual fruit and vegetable consumption at work and other workplace

characteristics may require consideration. The digital transformation of the work environment is changing the way of working, including the Communication, the interpersonal relations or Workplace Designs and the way fruit and vegetables may be offered to employees. The digital transformation may offer opportunities for organisations to affect the actual fruit and vegetable intake. This research does not consider the current digital transformation of the organisations for which the survey participants work and whether the workplace characteristics are influenced by the digital transformation. New ways of sharing information or remote working options may impact how employees perceive the organisational environment. Future research may focus on digital transformation-based changes in the workplace and which workplace characteristics become relevant for employees because of transformation of the workplace.

Free F&V Products and Hygienic Conditions

With the collected qualitative data, the two additional workplace characteristics Free F&V Products and Hygienic Conditions are identified. Free F&V Products is already discussed in the academic literature but is seen as being identified as a relevant workplace characteristic for white-collar employees in the German manufacturing industry. As limited academic research was found during the literature review process offering fruit and vegetables for free in white-collar jobs, the used definition of Accessibility considered an affordable offering. The finding that free fruit and vegetables are seen by white-collar employees as a workplace characteristic affecting the actual fruit and vegetable is seen as a source for future research, specifically on free fruit and vegetables in Germany's manufacturing industry.

The workplace characteristic explored as Hygienic Conditions was not found during the literature review process. It is the understanding of this research that the Hygienic Conditions are a new workplace characteristic and new knowledge provided to the academic literature. As the qualitative data collected with this research study was small and the research approach used aimed to verify only whether additional workplace characteristics might be considered, an detailed evaluation and exploration of this qualitative data element was not possible with this work. The finding that Hygienic Conditions are seen by white-collar employees as a workplace characteristic affecting the actual fruit and vegetable is seen as a source for future research.

Interrelations of Workplace Characteristics

It is pointed out that interrelations between workplace characteristics may exist and the co-existence might be relevant in affecting the consumption of fruit and vegetables in the office. It

may require more research to explore and understand which workplace characteristics are interrelated as well as to which degree. It might also be necessary to consider more explicit workplace characteristics.

It is also recommended for future research to explore and understand the effect of workplace characteristics' coexistence. This research found that Accessibility and Availability do not show the same effect on the intake of fruit and vegetables as in other academic studies. A reason for this might be that multiple workplace characteristics are studied. The effect of considering multiple workplace characteristics for interventions in the fruit and vegetable intake may need more research.

5.8 Brief Summary of this Chapter

This chapter discussed the findings of this research. The research questions were answered and the research gap was as closed with the findings of this research study. The evaluation of the effectiveness of the findings showed that the findings of this research can be taken into further consideration to discuss practical implications.

Workplace Design and Social Climate are the workplace characteristics able to predict an increase in the fruit and vegetable intake of white-collar employees with a managerial job role in the German manufacturing industry. Contrary findings were reported primarily for the variable Availability. The barriers and needs reported by the survey participants offer additional opportunities to employers to encourage the actual intake of fruit and vegetables of their employees. These opportunities are found in Free F&V Products and Hygienic Conditions.

This chapter also showed the limitations of this research study. The limitations were given through decisions made for the research approach, the circumstances of the research environment or the data collected with this study. In addition, the recommended future research based on the findings of this research is illustrated. It underlines that this research adds academic value and opens opportunities for further research.

The next chapter summarises this research and provides the overall conclusion.

6 Conclusion

This research aimed to explain the workplace characteristics required to affect the actual fruit and vegetable intake of white-collar employees in the German manufacturing industry. The motivation of this work was based on the interest to change the workplace characteristics for employees in a positive way and to save organisations costs through lower rates of presenteeism.

This research covered the white-collar employees because these employees appear to be most impacted by presenteeism (Chiara Ardito et al., 2012). The German manufacturing industry is the largest industry in Europe (Eurostat, 2018a) and offers the opportunity to reach a wide range of employees. In addition, cost advantages might be good for this industry, comparing its average return on sales of 7.3% (Statista, 2019) to the US with 25% - 30% (Klein, 2016).

Changes often require investments and, in practice, a justification for such investments is typically needed. A way of justification is to show a return for investments. Such a return based on changes in the workplace conditions might be possible through reducing the costs of presenteeism. Every year, costs of 2,399 euro through presenteeism impact German companies per employee (Maar and Fricker, 2011). Under the umbrella of Corporate Social Responsibility, organisations have an accountability to ensure their financial health but also to provide an appropriate work condition for the employees. While Merrill et al. (2012) found that presenteeism can be reduced through the consumption of fruit and vegetables, there is a gap in the academic literature as to how to achieve such an effect on the employees' actual fruit and vegetable intake. An impacting factor in terms of presenteeism is found in the workplace characteristics (Yang, Zhu and Xie, 2016). The purpose of this research was to understand the workplace characteristics which affect the actual fruit and vegetable intake at work and any differences based on the employee hierarchy position.

The philosophy of this research is seen as appropriate. Especially the discussion of the Workplace Design and Social Support benefited from the chosen philosophy. The discussion showed that these workplace characteristics are complex areas of employee management. It was found that both workplace characteristics appear to be relevant across all employee hierarchy positions, but taking different employee roles into consideration, it was found that both workplace characteristics are only relevant for a specific employee hierarchy group. The findings suggest considering different workplace characteristics and illustrate that the relation between workplace characteristics and the intake of fruit and vegetables is stronger in some employee

hierarchy position than others. The positivism research philosophy takes information from the survey participants provided through open-ended questions into account. This approach is seen as useful, as future research areas were identified with this research and the findings of the quantitative data were supported throughout the discussion. The research method applied to this work is seen as an appropriate fit in order to answer the research question.

The online survey had an appropriate response rate with 452 survey participants. The pilot testing was an important step in developing the survey and to achieve the actual response rate. The procedure used to publish and share the survey on the one hand directly with companies and on the other hand using social media channels to approach people directly appears to have been a good choice to collect the data of this research study.

Based on the quantitative analysis of the workplace characteristics using an online questionnaire, the results indicate that Workplace Design and Social Climate are statistically significant positive unique predictors for the fruit and vegetable intake of employees with a manager role. This means it can be concluded that the workplace characteristics Workplace Design and Social Climate can predict positively the actual fruit and vegetable intake of employees at work. The predictive effect size for Workplace Design and Social Climate is found to be small.

It was found further that Accessibility has a small negative contribution to the fruit and vegetable intake for Administrative Staff. This means the actual fruit and vegetable consumption becomes less when Accessibility is increased through interventions. The predictive effect size for Accessibility is found to be small.

Another viewpoint supported with this research is that stand-alone solutions for the consumption of fruit and vegetables may have a lower effectiveness. This research explains certain workplace characteristics in coexistence with other workplace characteristics. While Workplace Design and Social Climate are identified as positive predictors for the consumption of fruit and vegetables, using a multicomponent approach is recommended. In terms of academic contribution this thesis concludes that different workplace characteristics, as predictors of the intake of fruit and vegetables, become relevant when multiple workplace characteristics are considered simultaneously.

From a contribution to practice perspective, the findings of this research study mean that investing in the workplace characteristics Workplace Design and the Social Climate may lead to lower costs of presenteeism. The quality of Workplace Design and the grade of Social Climate are found as the elements affecting positively the intake of fruit and vegetables at work. The quality of Workplace Design includes enough space for employees to move and handle activities, pleasant indoor climate, adequate noise level and an overall as well as fruit and vegetable specific encouraging design. The grade of Social Climate includes that work is important to the employees, and that managers and employees value and support each other as well as work together in an appropriate way.

Organisations are assured through this thesis that managing the workplace environment has a positive effect on the intake of fruit and vegetables. It opens an additional management perspective, as traditionally the labour management is the focus of the organisational executive management to achieve improvements in the effectiveness and productivity of employees.

The awareness that presenteeism leads to additional costs for organisations and therefore impacts their competitiveness in their market as well as their long-term financial health is further developed through a new viewpoint. The findings of this research illustrate that the management of the workplace environment and its related workplace characteristics must also be considered by the executive management. The workplace characteristics bear the opportunity to impact relevant costs, which affect the financial situation of a business. Investments in the workplace characteristics may therefore have the potential to achieve a return. From a practical standpoint, this work allows expenses for workplace characteristics to be linked with cost reductions (lower rate of presenteeism) achieved through an effect on the intake of fruit and vegetables. This may support managers in their actual employee responsibility, under the umbrella of Corporate Social Responsibility.

The conclusion of this thesis is based on the understanding that managers who aim to justify the reliability and plausibility of investments into the workplace characteristics Workplace Design and Social Climate within their organisation become empowered.

Interventions developing the workplace characteristics affecting the intake of fruit and vegetables at work are seen to start with a more careful management of the employees. This may include respecting their actual task, encouraging teamwork, training manager’s management

style, caring about actual employee health and involving the employees in the intervention purpose as well as process. These elements are seen as aspects which improve the grade of Social Climate. Interventions improving the quality of Workplace Design start with a high-quality, appropriate, supportive and modern workplace including chairs, tables, windows, acoustic absorption, the look-and-feel of the office design and space to move around. This space does not mean only the employee specific space at the individual desk but also the overall space in the office to socialise with co-workers, to eat or to take a break. These factors are seen as having an effect in the employees' fruit and vegetable intake.

Based on the qualitative analysis of the workplace characteristics, the need to overcome the barrier of hygienically appropriate conditions was found. This includes the equipment provided to prepare fruit and vegetables as well as the place of preparation or the storage options for fruit and vegetables. Offering some fruit and vegetables for free was also identified as an element for consideration. The actual effect of these two qualitative findings is not explored with this research but these workplace characteristics indicate that further workplace characteristics may positively affect the actual fruit and vegetable consumption. From a practical perspective, this means for managers that there might be further additional workplace characteristics which require attention and potentially impact the actual fruit and vegetable intake, thereby reducing the costs of presenteeism. The findings of this work support management activities which aim to explore and understand relevant workplace characteristics. The time investment of the managers is seen as relevant and to be of value. The advantages of such management time investment as well as the intervention investment is justifiable. This thesis found out that other workplace characteristics which are not known or considered today are also relevant to employees. In this study, hygienic conditions and free fruit and vegetables were indicated as such new and additional workplace characteristics. Employees may see different or additional workplace characteristics as important. This may vary from company to company and needs suitable consideration and evaluation in practice. Furthermore, differences for such additional workplace characteristics may exist along employee groups and need to be taken into consideration. It is seen as unlikely that there is a one-size-fits-all solution.

As mentioned above in this research, multiple workplace characteristics have been considered in parallel. The management of stand-alone solutions is not seen as real-world-based, as no workplace consists of a single characteristic. Through this research, it is seen as reasonable to recommend managers and organisations to consider multiple workplace characteristics for

interventions at the same time. This may lead to differences in the effect of workplace characteristics. Workplace characteristics which have shown a positive effect from a stand-alone perspective may show a different outcome when changed in parallel to other workplace characteristics. Only considering multiple workplace characteristics is seen as real-world-based. This means that organisations are recommended to initiate an overall workplace characteristic improvement activity, instead of selecting a single workplace characteristic which is improved. Simply bringing new chairs to the office will probably not significantly increase the fruit and vegetable intake of employees. Instead of that, it is seen as the appropriate procedure to involve employees in order to understand their actual needs and to find out which additional workplace characteristics, aside from Workplace Design and Social Climate, are relevant for them. The employee involvement must be managed well. On the one hand, it is the source for finding unknown workplace characteristics which predict fruit and vegetable intake. On the other hand, it comes with the risk that employees simply list all needs, some of which are unrelated to the actual fruit and vegetable intake. Managers need to invest time in selecting the appropriate additional workplace characteristics identified. Detached from this management challenge, this study concludes that combining interventions which improve workplace characteristics specifically recommended by employees with interventions which improve the Social Climate and the Workplace Design is seen as making a difference with real-world relevance. Interventions which improve the Social Climate include encouraging teamwork or training a manager's management style. Interventions which improve the Workplace Design include a great office design and enough space.

Managing multiple interventions requires clear management attention in order to avoid a negligent approach. Considering multiple workplace characteristics does not mean that managers should just approach all workplace characteristics without being certain that the workplace characteristic is of positive relevance. The findings of this work indicate also that workplace characteristics used for interventions aiming to affect the fruit and vegetable intake positively must be chosen carefully. There is a risk that an intervention may lead to a negative effect on the consumption of fruit and vegetables for specific employee groups.

The small effect sizes of this research's findings do not make the practical relevance of this work negligible. Changes in the workplace characteristics which improve the quality of Workplace Design and the grade of Social Climate affect the fruit and vegetables intake in a positive way. The understanding of this research is that the actual consumption of fruit and vegetables of

employees with a manager role increases when Workplace Design and Social Climate improve. This increase may lead to a lower rate of presenteeism. It is unclear how much of the costs of presenteeism are saved.

Organisations following the understanding of this research who aim to affect the fruit and vegetable intake in order to reduce presenteeism could start improving the Workplace Design and the Social Climate by using small step investments in order to measure the actual effect in their specific environment. It might be necessary to find a well-balanced approach in order to affect the employees' desire to consume fruit and vegetables at work, which on the one hand promotes the consumption of fruit and vegetables and on the other hand does not lead to a social pressure due to a restrictive management style. This research recommends managing the Social Climate, but it should be noted that overstretching this intention bears the risk that employees recognise this negatively, which may reduce their willingness to listen.

The findings of this research might be important for the academic knowledge as it was found that workplace characteristics have the opportunity to affect the actual fruit and vegetable intake of white-collar employees in the German manufacturing industry. A balanced management of the workplace characteristics is needed in order to affect the fruit and vegetable intake at work. This builds on the work of Merrill et al. (2012) and offers a way to bring their conclusion into the real world through providing an answer to the "how-to-do-it" for specific employee groups.

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Appendix

Appendix 1.1 - Survey Letter in German

This survey letter was sent out to 150 selected companies in the German manufacturing industry.

University of Worcester

Sehr geehrte Damen und Herren,

die Produktivität ist in den meisten Unternehmen ein kritischer Maßstab, wobei Kostensenkungen oftmals eine wichtige Rolle spielen. Aufgrund von Präsentismus - darunter ist die Arbeitsleistung durch Mitarbeiter zu verstehen, die trotz Krankheit oder anderen Gründen arbeiten und daher weniger produktive sind - fallen pro Mitarbeiter in Deutschland jährliche Kosten in Höhe von 2.399 Euro an. Es hat sich in Untersuchungen gezeigt, dass der zunehmende Konsum von Obst und Gemüse am Arbeitsplatz das Risiko von Präsentismus bis zu 93% verringern kann.

Für ein Forschungsprojekt, das ich an der Universität Worcester (UK) in Zusammenarbeit mit der FHM Bielefeld durchführe, werden die erforderlichen Arbeitsplatzmerkmale untersucht, um den Obst- und Gemüsekonsum von Mitarbeitern in Bürojobs von produzierenden Unternehmen zu erhöhen. Wir glauben, dass Veränderungen am Arbeitsplatz dazu beitragen können, den Obst- und Gemüsekonsum zu erhöhen und folglich die Kosten durch Präsentismus zu senken.

Wir suchen daher freiwillige Teilnehmer für den Fragebogen, die primär sowohl einen **Bürojob** ausüben als auch in einem **produzierenden Gewerbe** in Deutschland tätig sind.

Wir würden uns sehr freuen, wenn Sie unser Forschungsprojekt unterstützen und den Link innerhalb Ihres Unternehmens verteilen würden.

Von den Forschungsergebnissen erwarten wir geschäftsorientierte und -fokussierte Handlungsempfehlungen für Unternehmen, wo Verbesserungen durch einen höheren Obst- und Gemüsekonsum am Arbeitsplatz zu Kostensenkungen führen können. Wir gehen weiter davon aus, dass dies zusätzliche positive Auswirkungen auf Unternehmen haben wird, wie zum Beispiel einen kulturellen Einfluss sowie eine Änderung in der Mitarbeitermoral.

Die Teilnahme an der Umfrage dauert ca. 10-15 Minuten.
Als Dankeschön werden 8 Amazon-Gutschein im Wert von 50 Euro verlost. Die Teilnahme an der Verlosung ist optional für jeden Teilnehmer.

Die Daten jedes Teilnehmers werden entsprechend dem ethischen Protokoll der University of Worcester verwaltet. Die DSGVO wird berücksichtigt als auch ist die Umfrage vollständig anonym.

Im Anhang finden Sie eine Kopie der Online-Umfrage als PDF.
Die Umfrage besteht aus drei Elementen:

1. Einführung mit Informationsblatt und Teilnehmerzustimmung
2. Fragebogen mit Verlosung
3. Abschlussstatement mit nützlichen Links

Christian Klein — Student – Doctor of Business Administration

University of Worcester

Um Transparenz zu gewährleisten, wird zuerst das Informationsblatt angezeigt und die Zustimmung des jeweiligen Teilnehmers eingeholt, bevor der Teilnehmer zu den Fragen gelangen kann. Das Abschlussstatement wird ebenfalls automatisch angezeigt.

Hier ist der Link zur Umfrage:
https://www.umfrageonline.com/s/klein_dba2019

Sollte innerhalb Ihres Unternehmens eine Genehmigung erforderlich sein (z. B. vom Eigentümer, der Personalabteilung oder dem Betriebsrat), lassen Sie mich bitte wissen, ob Sie hierfür weitere Informationen benötigen oder es Fragen zur Klärung gibt.

Nach Abschluss des Forschungsprojektes und erfolgreicher Disputation erstellen wir eine Zusammenfassung der Umfrageergebnisse. Wenn Sie es wünschen, stellen wir Ihnen diese dann als Zusammenfassung sehr gerne in Form eines Links zur Verfügung, oder können Ihnen auch einen Link zur vollständigen Studie zukommen lassen. Bitte lassen Sie mich wissen, ob Sie den einen oder anderen Download-Link erhalten möchten. Bitte beachten Sie dabei, dass die vollständige Studie nur in englischer Sprache zur Verfügung stehen wird. Die Zusammenfassung wird es in deutscher und englischer Sprache geben.

Wir sind davon überzeugt, dass die Beteiligung Ihrer Mitarbeiter an dieser Umfrage von Vorteil für Ihr Unternehmen sein wird. Wir freuen uns sehr über Ihre Unterstützung.

Vielen Dank im Voraus.

Mit freundlichen Grüßen
Christian Klein

Christian Klein Student – Doctor of Business Administration

Appendix 1.2 - Survey Letter in English

This survey letter was sent out to 150 selected companies in the German manufacturing industry.

University of Worcester

Dear Sir or Madam,

Productivity is a critical measure in most companies, with cost reductions often playing an important role. Due to presenteeism - this means the work performed by employees who work despite illness or other reasons and are therefore less productive - there are annual costs of € 2,399 per employee in Germany. Research has shown that increasing consumption of fruits and vegetables in the workplace can reduce the risk of presentability by up to 93%.

For a research project I am executing at the University of Worcester in cooperation with the FHM Bielefeld, workplace characteristics required to increase the fruit and vegetable consumption of employees in a white-collar job are studied. We believe that changes in the workplace can help increasing the fruit and vegetable consumption and, consequently, reduce the cost of presenteeism.

We are therefore looking for volunteer participants in the questionnaire, who have a **white-collar job** in the **manufacturing industry** in Germany.

We would be very happy if you support our research project and distribute the link within your company.

From the research results, we expect business-oriented and focused recommendations for companies, where improvements in the workplace environment can lead to cost reductions through an increased fruit and vegetable consumption. We further assume that this will have additional positive effects towards the organizational cultural and the employee morale.

Participation in the survey takes approximately 10-15 minutes.
As a thank-you, 8 Amazon vouchers worth 50 euros will be given through a draw. Participation in the draw is optional for the survey participants.

Each participant's data is managed in accordance with the University of Worcester ethical protocol. The GDPR is taken into account as well as the survey is completely anonymous.

A copy of the online survey can be found in the attachment as a PDF.
The survey consists of three elements:

1. Introduction with information sheet and participant confirmation
2. Questionnaire with price draw
3. Final statement with useful links

Christian Klein — Student – Doctor of Business Administration

University of Worcester

To ensure transparency, the information sheet is displayed first and the consent of the participant is obtained before the participant can get to the questions. The final statement is also displayed automatically.

Here is the link to the survey:
https://www.umfrageonline.com/s/klein_dba2019

In case an approval is required within your company (e.g. from the owner, the HR department or the works council), please let me know if you need further information or if there are any questions to be clarified.

After completing the research project and a successfully award, we create a summary of the survey results. If you wish, we are happy to provide you with a summary or we can send you a link to the complete study. Please let me know if you would like to receive the one or the other download link. Please note that the full study will only be available in English. The summary will be available in German and English.

We believe that your employees' participation in this survey will be beneficial for your company. We look forward to your support.

Thanks in advance.

Best regards
Christian Klein

Christian Klein Student – Doctor of Business Administration

Appendix 2.1 - Survey in German

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Der Konsum von Obst und Gemüse in Deutschlands produzierendem Gewerbe

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In Vorbereitung zu dieser Studie haben wir festgestellt, dass viele Organisationen Potential zur Verbesserung des Arbeitsplatzumfeldes haben. Das Ergebnis dieser Umfrage soll dem Unternehmensmanagement Gründe zur Umsetzung solcher Verbesserungen aufzeigen.

Ein erhöhter Obst- und Gemüsekonsum kann zu einer jährlichen Kostenersparnis von mehr als 2.000 Euro pro Mitarbeiter führen, da Krankheit oder Produktivitätsverlust reduziert werden.

Mit der Beantwortung dieser Umfrage helfen Sie uns, die Arbeitsplatzbedingungen zu bestimmen, die den Obst- und Gemüsekonsum fördern und folglich das Arbeitsplatzumfeld verbessern.

Diese Umfrage dauert ungefähr 5 - 10 Minuten.

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ABLAUF

Der Fragebogen ist in 4 Abschnitte aufgeteilt. Bei den meisten Fragen müssen Sie sich nur für eine Auswahl auf einer Skala entscheiden. Nur in Abschnitt 4 wird um eine Rückmeldung mittels offener Fragen gebeten.

Bitte beachten Sie, dass Ihre Teilnahme an diesem Fragebogen freiwillig ist.

Sie können die Umfrage jederzeit beenden. Sie können die Umfrage jederzeit beenden. Um den von Ihnen beantworteten Fragebogen für die Studie heranziehen zu können, sind alle Fragen in den Bereichen 1-3 zu beantworten. Sie können lediglich in Bereich 4 Fragen offen lassen. Ferner können Sie Ihre Teilnahme binnen 2 Wochen nach Abschluss widerrufen. In der Umfrage bitten wir Sie daher, einen persönlichen sowie eindeutigen Teilnahmecode zu erstellen. Um Ihre Teilnahme nachträglich zu widerrufen, senden Sie bitte eine E-Mail an den Administrator der Umfrage und geben Sie bitte Ihren persönlichen Teilnahmecode als Referenz an.

Sie können den Fragebogen auch unterbrechen und zu einem späteren Zeitpunkt fortführen. Bitte folgen Sie hierzu den Anweisungen in dem nachfolgenden Fragebogen.

Wenn Sie mehr über die Ziele der Umfrage oder über den Konsum von Obst und Gemüse erfahren möchten, lesen Sie sich bitte das Abschlussstatement nach dem Fragebogen durch.

Teilnahme

Bitte haben Sie Verständnis dafür, dass diese Umfrage einen vordefinierten Forschungsumfang hat. Um an der Umfrage teilnehmen zu können, müssen Sie die folgenden drei Bedingungen erfüllen.

- Sie müssen in Deutschland arbeiten. Das bedeutet, Sie sind in Deutschland berufstätig und haben Ihr reguläres Büro in Deutschland.
- Ihr Arbeitgeber ist in dem produzierenden Gewerbe tätig. Das bedeutet, dass Ihr Arbeitgeber Produkte herstellt und diese entweder an andere Unternehmen oder an Konsumenten verkauft.
- Sie sind ein Büroangestellter. Das bedeutet, Sie üben in erster Linie eine administrative oder eine verwaltende Aufgabe in einem Büro aus.

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Vorteile

Sie können an einer Verlosung eines Amazon-Gutscheins über 50 Euro teilnehmen. Hierzu werden nach Abschluss der Umfrage 8 Teilnehmer zufällig ausgewählt. Um an der Verlosung teilnehmen zu können, bitten wir Sie am Ende des Fragebogens eine E-Mail-Adresse anzugeben.

Sie können ebenfalls einen Download-Link für eine 1-seitige Zusammenfassung erhalten. Hierzu bitten wir Sie am Ende des Fragebogens ebenfalls eine E-Mail-Adresse anzugeben.

Risiko

Es gibt keine absehbaren Risiken durch die Teilnahme an dieser Umfrage.

Geheimhaltung und Vertraulichkeit

Geheimhaltung und Vertraulichkeit ist uns wichtig und Ihre Daten werden dementsprechend behandelt. Die Umfrage ist so strukturiert, dass Ihre Anonymität gewährleistet wird. Bitte seien Sie versichert, dass …

- Ihre Antworten gemäß den ethischen Richtlinien der University of Worcester vollständig vertraulich behandelt werden.
- wir nicht nach Ihrem Namen oder dem Namen Ihres Arbeitgebers fragen.
- der Dienstanbieter „umfrageonline.com“ Ihre IP-Adresse nicht speichern wird.
- niemand in Ihrer Firma Zugriff auf Ihre Antworten oder auf bereitgestellte Informationen hat.
- wenn Sie eine E-Mail an den Administrator senden, um Ihre Teilnahme zu widerrufen, Ihre Daten vollständig gelöscht werden. Lediglich Ihre E-Mail wird für Auditzwecke passwortgeschützt gespeichert.
- die Umfrage der EU-Datenschutzverordnung (DSGVO) entspricht.
- Ihre personenbezogenen Daten verwendet werden, um jene Bereiche des Arbeitsplatzes zu bestimmen, die angepasst werden müssen, damit der Obst- und Gemüsekonsum am Arbeitsplatz erhöht werden kann.
- mit Ihrer Zustimmung Sie uns die Rechtsgrundlage zur Verarbeitung Ihrer Umfragedaten geben.
- Ihre Daten nur mit den Betreuern dieser Untersuchung geteilt werden.
- Ihre Daten 10 Jahre passwortgeschützt gespeichert werden.
- Sie die Umfrage jederzeit beenden, Fragen überspringen oder den Abschluss innerhalb von 2 Wochen widerrufen können.

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Ihre Antworten bleiben folglich anonym. Niemand kann Sie oder Ihre Antworten identifizieren und niemand weiß, ob Sie oder ob Sie nicht an der Studie teilgenommen haben.

Wenn Sie an der Verlosung eines Amazon-Gutscheins teilnehmen möchten oder einen Download-Link erhalten möchten, seien Sie versichert, dass Ihre E-Mail-Adresse von Ihren Antworten vor der Datenanalyse getrennt wird. Ihre angegebene E-Mail-Adresse wird passwortgeschützt gespeichert.

Kontakt

Wenn Sie Fragen zu dieser Umfrage, zum strukturellen Aufbau oder zu anderen Anliegen, wie zum Beispiel Datenschutz, Freiwilligkeit oder Risiken haben, wenden Sie sich bitte an den Administrator der Umfrage:

Christian Klein, MBA
University of Worcester
Tel: 0049 176 244 76 298
Email: klec1_16@uni.worc.ac.uk

Wenn irgendwelche Bedenken nicht über den Administrator angesprochen werden können oder wenn Sie der Meinung sind, dass dies nicht der angemessene Weg ist, wenden Sie sich an den nachstehenden Kontakt:

Karen Dobson
Secretary to Humanities, Arts and Social Sciences Research Ethics Committee
University of Worcester
Henwick Grove
Worcester WR2 6AJ
ethics@worc.ac.uk

Sie können sich auch an den Direktor dieser Studie wenden:

Professor Jan Francis-Smythe
C. Psychol.
Registered Psychologist (HCPC)
Occupational Psychologist
BSc (Hons), MSc, Dip Psych, PhD, AFBPsS

University of Worcester

University of Worcester
Business School
City Campus
Castle Street, Worcester, WR1 3AS
Tel: 01905 85 5242

Wenn Sie mit dem Head of Information der University of Worcester in Kontakt treten möchten, verwenden Sie bitte die nachfolgenden Kontaktdaten:

Head of Information Assurance
University of Worcester
Henwick Grove
Worcester WR2 6AJ
Email: infoassurance@worc.ac.uk
Tel: 01905 855014

Bestätigung der Teilnehmer

Sie können eine Kopie dieser Informationen und Ihrer Einwilligung für Ihre Unterlagen ausdrucken. Wenn Sie auf die Schaltfläche "ich stimme zu" klicken, bestätigen Sie, dass …

- Sie die obigen Informationen verstanden haben.
- Sie freiwillig teilnehmen.
- Sie in Deutschland und im produzierenden Gewerbe tätig sind.
- Sie Büroangestellter (Verwaltungs- oder administrativer Bürojob) sind.

☐ Ich stimme zu

Wenn Sie eine oder mehrere der obigen Aussagen nicht bestätigen können, verlassen Sie bitte die Umfrage, indem Sie Ihren Webbrowser schließen.

University of Worcester

INSTUKTIONEN
Beantworten Sie jede Frage, indem Sie die jeweilige Box, der für Sie stimmigen Position, anklicken. Sie können jede Frage nur mit einer Antwort beantworten.

Bei einigen Fragen werden Sie wie folgendes Beispiel zeigt nach einer Antwort auf einer 5-Punkte-Skala gefragt.

Stimme völlig zu	☐	☐	☐	☐	☐	stimme nicht zu
	5	4	3	2	1	

Wir werden Sie auffordern, einen persönlichen und eindeutigen Teilnahmecode zu erstellen. Dies ist ein Code, den Sie selbst generieren können. Sie benötigen diesen Code, sollten Sie dem Administrator der Umfrage mitteilen wollen, dass Sie nach Abschluss der Umfrage Ihre Teilnahme widerrufen möchten. Bitte beachten Sie, dass wir ein Widerrufsrecht nur für einen Zeitraum von zwei Wochen nach Abschluss der Umfrage zulassen können. Bitte wählen Sie keinen Code wie zum Beispiel "1234". Bitte stellen Sie sicher, dass der Code eindeutig ist. Wir empfehlen eine Mischung aus Buchstaben, Zahlen und Symbolen. Sie können zum Beispiel die letzten 2 Buchstaben Ihres Nachnamens, Ihren Geburtsmonat, Ihren Geburtstag, die letzten 2 Ziffern Ihrer Telefonnummer, den ersten Buchstaben des Namens Ihrer Mutter und ein Symbol Ihrer Wahl verwenden. Wenn der Code nicht eindeutig ist, können wir keinen Widerruf nach Abschluss der Umfrage garantieren.

Wenn wir die Wörter Büro, Arbeitsbereich oder Arbeitsplatz erwähnen, meinen wir Folgendes:

Büro = das Gebäude oder die Gebäude Ihres Arbeitgebers, in dem sich Ihr Arbeitsbereich befindet
Arbeitsbereich = Büro oder Korridor, den Sie mit Kollegen teilen
Arbeitsplatz = der Bereich, wo Sie arbeiten, einschließlich Schreibtisch, Stuhl usw.

Teilnahmecode
Wie lautet Ihr persönlicher und eindeutiger Teilnahmecode? (Bitte vermeiden Sie einen einfachen Code wie 1234). Bitte notieren Sie sich diesen Code und bewahren Sie diesen gut auf.

_____

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ÜBER SIE UND IHREN JOB

Diese folgenden Fragen beziehen sich auf Sie und Ihren aktuellen Job

1. Wie alt sind Sie?
   - ☐ < 30
   - ☐ 31 – 40
   - ☐ 41 – 50
   - ☐ 51 >

2. Sind Sie männlich oder weiblich?
   - ☐ M
   - ☐ W

3. Wo befindet sich Ihr regulärer Arbeitsplatz?
   - ☐ Im Bürogebäude Ihres Arbeitgebers
   - ☐ Im Heimbüro (Home-Office)
   - ☐ Virtuell in einem anderen Büro
   - ☐ Irgendwo anders

4. Wie häufig reisen Sie für Ihren Job?

   Sehr hoch ☐ ☐ ☐ ☐ ☐ Sehr gering
   5 4 3 2 1

5. Was ist Ihr höchster Bildungsabschluss?
   - ☐ Hauptschulabschluss oder vergleichbar
   - ☐ Mittlerer Abschluss oder vergleichbar
   - ☐ Abgeschlossene Berufsausbildung oder vergleichbar
   - ☐ Abgeschlossene Hochschulprüfung oder vergleichbar

6. Würden Sie sagen, dass Ihr Arbeitgeber es Ihnen ermöglicht, eine Pause einzulegen, wenn Sie es möchten?

   Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
   5 4 3 2 1

7. Würden Sie sagen, dass Ihr Arbeitgeber Ihnen erlaubt, selbst zu entscheiden, wie lange Sie eine Pause machen wollen?

   Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
   5 4 3 2 1

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8. Welche organisatorische Position haben Sie?
   - ☐ Administrativer Büroangestellter (z. B. Assistenz, Kundenbetreuer)
   - ☐ Manager (z. B. Account Manager, Controller, Entwickler)
   - ☐ Senior Manager (z. B. Team-Leader, Key Account Manager)
   - ☐ Executive Manager (z. B. Head of Business, Country Manager)
   - ☐ Inhaber, Vorstand oder vergleichbar (z. B. CEO, CFO, COO, Geschäftsführer)
   - ☐ Anderer Büroangestellter

9. Würden Sie sagen, Sie nehmen regelmäßig an Besprechungen abseits Ihres Arbeitsplatzes teil?

Stimme völlig zu	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Stimme nicht zu

10. Wie viel Ihrer Arbeitszeit verbringen Sie in Besprechungen?

Sehr viel	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Sehr gering

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IHR OBST- UND GEMÜSEKONSUM

Bitte teilen Sie uns bei den folgenden Fragen Einzelheiten zu Ihrem Obst- und Gemüseverzehr während der Arbeitszeit mit. Bitte berücksichtigen Sie die letzten sechs Wochen.

11. Wie oft haben Sie auf der Arbeit Obst und Gemüse gegessen?
    - ☐ Täglich
    - ☐ Mehrfach die Woche
    - ☐ Mehrfach im Monat
    - ☐ Einmal im Monat oder weniger
    - ☐ Niemals

12. Wie viel Obst und Gemüse haben Sie insgesamt an einem Arbeitstag gegessen?
    - ☐ Ich esse kein Obst und Gemüse
    - ☐ Weniger als 50 gr.
    - ☐ 51 – 200gr.
    - ☐ 201 – 400gr.
    - ☐ 401 – 600gr.
    - ☐ **mehr als 600gr.**

200 g Obst oder Gemüse sind zum Beispiel:		
0,5 Broccoli	2 kleine Äpfel	1 Fleischtomate
4 Radieschen	2 Bananen	2,5 Kartoffeln
2 Melonenscheiben	3 Karotten	1 große Orange

13. Zu welcher Tageszeit essen Sie normalerweise auf der Arbeit Obst und Gemüse?
    - ☐ Während des Morgens
    - ☐ Zum Mittagessen
    - ☐ Während des Nachmittags
    - ☐ Zum Abendessen
    - ☐ Zu verschiedenen Zeiten am Tag
    - ☐ Ich esse kein Obst und Gemüse bei der Arbeit

14. Würden Sie sagen, dass Sie den Geschmack der meisten Obst- und Gemüsesorten mögen?

Stimme völlig zu	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Stimme nicht zu

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15. Wenn Sie beabsichtigen würden, mehr Obst und Gemüse auf der Arbeit zu essen, wie sicher sind Sie, dass Sie es schaffen könnten?

Sehr zuversichtlich	☐	☐	☐	☐	☐	Sehr unsicher
	5	4	3	2	1	

16. Würden Sie sagen, dass Sie während Ihrer Arbeitszeit genug Zeit haben, um Obst und Gemüse zu essen?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

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EIGENSCHAFTEN IHRES ARBEITSPLATZES

Denken Sie bei den folgenden Fragen über Ihre Arbeitsumgebung nach und teilen Sie uns bitte deren Besonderheiten mit. Bitte berücksichtigen Sie die letzten sechs Wochen.

Konsum von Obst und Gemüse

17. Haben Sie während der Arbeit Zugang zu einer Kantine oder Ähnlichem?
    Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
    5 4 3 2 1

18. Wie beurteilen Sie Ihre Akzeptanz der Kantine oder Ähnlichem als Essplatz? (Wenn Sie keinen Zugang zu einer Kantine oder Ähnlichem haben, können Sie diese Frage überspringen.)
    Sehr hoch ☐ ☐ ☐ ☐ ☐ Sehr gering
    5 4 3 2 1

19. Wie beurteilen Sie das Obst- und Gemüseangebot in der Kantine oder Ähnlichem? (Wenn Sie keinen Zugang zu einer Kantine oder Ähnlichem haben, können Sie diese Frage überspringen.)
    Sehr gut ☐ ☐ ☐ ☐ ☐ Sehr schlecht
    5 4 3 2 1

20. Wird bei Ihnen im Unternehmen Obst und Gemüse in Meetings als Snack angeboten?
    Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
    5 4 3 2 1

21. Bietet Ihr Arbeitgeber an verschiedenen Standorten im Büro Obst und Gemüse an? (Wenn Sie beispielsweise in einem Home-Office arbeiten, können Sie diese Frage überspringen.)
    Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
    5 4 3 2 1

22. Wie beurteilen Sie die verschiedenen Obst- und Gemüsesorten, die Ihnen bei der Arbeit angeboten werden?
    Sehr gut ☐ ☐ ☐ ☐ ☐ Sehr schlecht
    5 4 3 2 1

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Möglichkeiten zur Zubereitung von Obst und Gemüse

23. Wie beurteilen Sie die Qualität des Obst- und Gemüseangebots der Kantine oder Ähnlichem? (Wenn Sie keinen Zugang zu einer Kantine oder Ähnlichem haben, können Sie diese Frage überspringen.)

Sehr gut	☐	☐	☐	☐	☐	Sehr schlecht
	5	4	3	2	1	

24. Wie beurteilen Sie Ihren Zugriff auf eine Örtlichkeit, wo Sie während der Arbeit selbst Obst und Gemüse zubereiten können (z. B. eine Küche)?

Sehr gut	☐	☐	☐	☐	☐	Sehr schlecht
	5	4	3	2	1	

25. Wie gut ist diese Örtlichkeit für die Zubereitung von Obst und Gemüse gerüstet?

Sehr gut	☐	☐	☐	☐	☐	Sehr schlecht
	5	4	3	2	1	

26. Würden Sie sagen, dass Sie aufgrund dieses Ortes vermehrt Lust haben, Obst und Gemüse zu essen?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

27. Würden Sie sagen, dass Sie den Ort für die Zubereitung von Obst und Gemüse Kollegen empfehlen können?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

28. Wenn Sie auf der Arbeit sind, würden Sie sagen, dass Sie aus verschiedenen Obst- und Gemüsesorten zum Essen wählen können?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

29. Würden Sie sagen, dass die Kosten für Obst und Gemüse Sie während der Arbeit hindern, diese zu essen?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

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Arbeitsplatzgestaltung

30. Würden Sie sagen, dass Ihr Arbeitgeber einen angemessenen und modernen Arbeitsplatz bietet?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

31. Wie bewerten Sie die ergonomische Konfiguration Ihres Arbeitsplatzes, z. B. Ihren Tisch, Ihren Stuhl und Ihre Computerausstattung?

Sehr gut	☐	☐	☐	☐	☐	Sehr schlecht
	5	4	3	2	1	

32. Denken Sie, dass Ihr Arbeitsplatz (z. B. Ihr Büro oder Ihr Schreibtisch) genügend Platz bietet, sodass Sie sich frei bewegen können sowie Ihre Unterlagen und Arbeitsmittel ordnungsgemäß bearbeiten können?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

33. Wie beurteilen Sie die Frischluft und das Raumklima an Ihrem Arbeitsplatz?

Sehr gut	☐	☐	☐	☐	☐	Sehr schlecht
	5	4	3	2	1	

34. Wie beurteilen Sie den Lärm an Ihrem Arbeitsplatz?

Sehr gut	☐	☐	☐	☐	☐	Sehr schlecht
	5	4	3	2	1	

35. Würden Sie sagen, dass die Gestaltung Ihres Arbeitsplatzes eine Umgebung bietet, die den Obst- und Gemüsekonsum unterstützt?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

36. Würden Sie sagen, dass die Gestaltung Ihres Arbeitsplatzes Sie dazu animiert, Obst und Gemüse zu konsumieren?

Stimme völlig zu	☐	☐	☐	☐	☐	Stimme nicht zu
	5	4	3	2	1	

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Soziales Klima bei der Arbeit

37. Empfinden Sie Ihre Arbeit als wichtig?
Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

38. Streben Sie nach erfolgreichen Arbeitsergebnissen?
Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

39. Achtet Ihr Arbeitgeber darauf, dass das Team gut zusammenarbeitet?
Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

40. Würden Sie sagen, dass Sie sich von Ihrem Arbeitgeber gewertschätzt fühlen?
Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

41. Würden Sie sagen, dass Ihr Chef Sie bei Bedarf unterstützt?
Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

42. Wie würden Sie die Zusammenarbeit zwischen Ihnen und Ihren Kollegen beschreiben?
Sehr gut ☐ ☐ ☐ ☐ ☐ Sehr schlecht
5 4 3 2 1

43. Wie beurteilen Sie die Bedingungen einer gesunden Ernährung und des Essens auf der Arbeit?
Sehr gut ☐ ☐ ☐ ☐ ☐ Sehr schlecht
5 4 3 2 1

44. Würden Sie sagen, Ihr Arbeitgeber sorgt sich um Ihren Obst- und Gemüsekonsum?
Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

45. Würden Sie sagen, Ihre Kollegen sorgen sich um Ihre Gesundheit?
Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

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46. Sprechen Sie mit Ihren Kollegen über die Vorteile, den Geschmack oder den Konsum von Obst und Gemüse?

Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
5 4 3 2 1

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Kommunikation

47. Würden Sie sagen, dass Ihr Arbeitgeber Ihnen allgemeine Informationen über die Firma mitteilt?
    Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
    5 4 3 2 1

48. Wie beurteilen Sie die Qualität dieser allgemeinen Mitteilung?
    Sehr gut ☐ ☐ ☐ ☐ ☐ Sehr schlecht
    5 4 3 2 1

49. Wie zufrieden sind Sie mit den Bemühungen Ihres Arbeitgebers, Sie über die Firma auf dem Laufenden zu halten?
    Sehr zufrieden ☐ ☐ ☐ ☐ ☐ Sehr unzufrieden
    5 4 3 2 1

50. Würden Sie sagen, dass Ihr Arbeitgeber Ihnen regelmäßig Informationen über den Konsum von Obst und Gemüse im Allgemeinen mitteilt?
    Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
    5 4 3 2 1

51. Würden Sie sagen, dass Ihr Arbeitgeber Ihnen die Vorteile des Obst- und Gemüsekonsums erklärt?
    Stimme völlig zu ☐ ☐ ☐ ☐ ☐ Stimme nicht zu
    5 4 3 2 1

52. Wie beurteilen Sie die Qualität dieser spezifischen Obst- und Gemüsekommunikation?
    Sehr gut ☐ ☐ ☐ ☐ ☐ Sehr schlecht
    5 4 3 2 1

53. Wie zufrieden sind Sie mit den Bemühungen Ihres Arbeitgebers, Sie über die Möglichkeiten informiert zu halten, Obst und Gemüse auf der Arbeit zuzubereiten und zu essen?
    Sehr zufrieden ☐ ☐ ☐ ☐ ☐ Sehr unzufrieden
    5 4 3 2 1

University of Worcester Christian Klein

University of Worcester

ARBEITSPLATZANFORDERUNGEN

Bitte denken Sie bei den folgenden Fragen über Ihren derzeitigen Arbeitsplatz, Ihren Arbeitsbereich und Ihr Büro nach.

54. Gibt es Hürden an Ihrem Arbeitsplatz, die Sie daran hindern, Obst und Gemüse bei der Arbeit zu essen? (Arbeitsplatz = der Bereich, wo Sie arbeiten, einschließlich Schreibtisch, Stuhl usw.)

55. Gibt es in Ihrem Arbeitsbereich irgendwelche Hürden, die Sie daran hindern, Obst und Gemüse bei der Arbeit zu essen? (Arbeitsbereich = Büro oder Korridor, den Sie mit Kollegen teilen)

56. Gibt es Hürden in Ihrem Büro, die Sie daran hindern, Obst und Gemüse bei der Arbeit zu essen? (Büro = das Gebäude oder die Gebäude Ihres Arbeitgebers, in dem sich Ihr Arbeitsplatz befindet)

57. Bietet Ihr Arbeitgeber besondere Arbeitsplatzbedingungen, die Sie dazu anregen, Obst und Gemüse zu essen? Wenn ja welche?

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58. Welche Maßnahme würden Sie speziell für die Bedingungen des physischen Arbeitsplatzes empfehlen, die Ihren Obst- und Gemüsekonsum beeinflussen? Der physische Arbeitsplatz umfasst zum Beispiel den Schreibtisch, das Equipment in der Küche, den Aufbau von Räumen, usw.

59. Welche Maßnahme würden Sie speziell für die Bedingungen des psychosozialen Arbeitsplatzes empfehlen, die Ihren Obst- und Gemüsekonsum beeinflussen? Der psychosoziale Arbeitsplatz bezeichnet die zwischen-menschlichen Beziehungen.

60. Gibt es andere Unterstützung, die Sie sich von Ihrem Arbeitgeber wünschen, damit Sie während der Arbeit mehr Obst- und Gemüse essen?

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Wenn Sie an der Verlosung eines Amazon-Gutscheins über 50 Euro teilnehmen möchten, geben Sie hier bitte Ihre E-Mail-Adresse ein:

Wenn Sie einen Download-Link zur genehmigten Dissertation erhalten möchten, geben Sie hier bitte Ihre E-Mail-Adresse ein:

Wenn Sie einen Download-Link zur Zusammenfassung der genehmigten Dissertation erhalten möchten, geben Sie bitte hier Ihre E-Mail-Adresse ein:

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Nachbesprechung der Umfrage: Diese Nachbesprechung wird im dritten Abschnitt der Webseite nach den Fragen angezeigt. Nach Abschluss der Fragen wird allen Teilnehmern diese Nachbesprechung gezeigt.

Unter anderem hat eine Studie, die zwischen 2007 und 2009 in Südostbrasilien durchgeführt wurde, gezeigt, dass die Arbeitswelt bei der Steigerung des Obst- und Gemüsekonsum eine bedeutende Relevanz hat. So zeigt die Studie, dass Veränderungen im Arbeitsumfeld einen positiven Effekt auf den Obst- und Gemüsekonsum haben. Dazu zählen zum Beispiel die Optik der Gerichte, die Verbesserung der Darstellung, die Organisation und Attraktivität von Gerichten oder auch Bildungsaspekte (Franco, De Castro und Wolkoff 2013).

Jedoch fallen durch Veränderungen im Arbeitsumfeld, wie zum Beispiel eine Klimaanlage, neue Tische oder eine bessere Qualität der Kantine, Kosten an, wodurch Erwartungen bei der Unternehmensführung entstehen. Naturgemäß berechnet ein Unternehmen daher eine Investitionsrendite, bevor etwaige Kosten genehmigt werden (Chipma 2018; Weil 2010). Die Kosten für Präsentismus spielen daher eine zentrale Rolle, da Obst und Gemüse oder andere fettarme Produkte die Wahrscheinlichkeit von Präsentismus um mehr als 90% verringern (Merrill et al. 2012). Präsentismus ist ein Kostenfaktor der sich aufgrund von Produktivitätsverlust ergibt, wenn Mitarbeiter arbeiten, während sie krank sind oder die nicht üblichen Leistung erbringen können (Chiara Ardito et al. 2012; Yang, Zhu und Xie 2016). Diese Kosten werden mit 2.399 Euro pro Mitarbeiter und Jahr angesetzt (Maar und Fricker 2011).

Die Kosten durch Präsentismus könnten durch eine Veränderung der Arbeitsplatzmerkmale gesenkt werden. Hierzu muss mittels dieser Veränderungen ein erhöhter Konsum von Obst und Gemüse erreicht werden (Merrill et al. 2012). Die Veränderungen am Arbeitsplatz sollen zu Gunsten der Mitarbeiter sein, weshalb diese Untersuchung beabsichtigt, unterschiedliche Arbeitsplatzmerkmale herauszufinden. Da die Kosten für die organisatorische Rentabilität und ihre wirtschaftliche Verantwortung im Rahmen der sozialen Verantwortung von Unternehmen (Voiculescu und Yanacopulos 2011) von entscheidender Bedeutung sind, könnte die Bestimmung der Investitionsrendite auf den Ergebnissen dieser Untersuchung beruhen und Managern die Möglichkeit geben, Veränderungen am Arbeitsplatz finanziell zu rechtfertigen. Die Studie beabsichtigt nicht, den Obst- und Gemüseverzehr einzelner Personen zu bewerten oder diesbezügliche Empfehlungen zu geben. Es wird lediglich versucht, die Merkmale des Arbeitsplatzes zu ermitteln, die dazu beitragen könnten, den Obst- und Gemüseverbrauch am Arbeitsplatz zu fördern.

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Nützliche Links

Wenn Sie mehr über eine gesunde Ernährung erfahren möchten, besuchen Sie eine der beiden nachstehenden Websites:

https://www.bzfe.de
https://www.dge.de

Appendix 2.2 - Survey in English

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Fruit and Vegetable consumption in Germany's manufacturing industry

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We noticed many organizations have opportunities to improve their workplace environment. The result of this survey shall deliver a justification towards the management to implement such improvements.

An increased fruit and vegetable intake is confirmed to reduce costs of more than 2.000 Euros per employee per year due to a reeducation of sickness or productivity losses. Please help us by responding to this survey to explore the workplace conditions supporting the fruit and vegetable consumption as a justification to improve the workplace.

This survey should take approximately 5 – 10 minutes.

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Process

The questionnaire has 4 sections. Most questions will ask you to make a choice on a scale. Only section 4 requires some written feedback.

Your participation in this questionnaire is voluntary.

You may exit the survey at any time. You also can decide to skip questions. You can also withdraw from the survey post completion within 2 weeks. In the questionnaire we will ask you therefore to generate an own unique participation code. If you wish to withdraw from the survey post completion, you will need to email the survey administrator and use this code as a reference.

You can also interrupt your questionnaire and return later. Please follow the instructions within the questionnaire.

After completing the questionnaire, please read through the debrief if you would like to learn more about the survey's objectives or consuming fruit and vegetables.

Participation

Please understand that this survey has a defined research scope and you need to meet therefore the following three conditions to participate.

- Working in Germany. This means if you are employed in Germany and your regular office is in Germany.
- Your employer is operating in the manufacturing industry. This means your employer is producing goods sold either B2B or B2C.
- You are employed for a white-collar job. This means you are primarily executing a managing or administrative job role which is office based.

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Benefits

On completion you may participate in a draw for an Amazon voucher of 50 Euro. 8 Participants will be randomly selected after the survey is closed. In order to participate in the draw, you will need to provide an email address at the end of the **questionnaire**.

You may wish to receive a download link for a 1-page executive summary. In order to receive a download link, you will need to provide an email address at the end of the **questionnaire**.

Risks

There are no foreseeable risks involved in participating in this study.

Confidentiality

We are serious about your confidentiality and will treat your data appropriately. The survey is structured ensuring your anonymity. Please be ensured that,

- Your answers will be kept completely confidential following the ethical guidelines of the University of Worcester.
- We will not ask for your name or your employers name.
- The service provider "umfrageonline.com" will not save your IP address.
- No one in your organization will have access to your given answers or any offered information.
- If you email the survey administrator to withdraw post completion, your data will be deleted. Your email will be saved password-protected for audit purposes.
- The survey abides by the EU General Data Protection Regulation (GDPR) (see details below) GDPR.
- Your personal data will be processed in order to explore areas of the workplace required to be transformed to increase the fruit and vegetable consumption at work.
- Confirming to this consent form, you will provide the legal basis to process your data.
- Your data will be shared only with the supervisors of this research.
- Your data will be saved password-protected for 10 years.
- You can exit the survey at any time, skip questions or withdraw post completion within 2 weeks.

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Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

If you wish to participate in the draw for an Amazon voucher or if you wish to receive a download link, please be assured that your email address will be separated from your answers before any data analysis will be carried out. Your provided email address will be saved password-protected.

Contact

If you have any questions about this survey, its structural setup or any other concerns towards e.g. data protection, voluntariness or risks, please ask the survey administrator.

Christian Klein, MBA
University of Worcester
Tel: 0049 176 244 76 298
Email: klec1_16@uni.worc.ac.uk

If any concerns are not addressed through this route or if you feel this route is not appropriate, you should approach the named contact below:

Karen Dobson
Secretary to Humanities, Arts and Social Sciences Research Ethics Committee
University of Worcester
Henwick Grove
Worcester WR2 6AJ
ethics@worc.ac.uk

You may also contact the named Director of this Study below.

Professor Jan Francis-Smythe
C. Psychol.
Registered Psychologist (HCPC)
Occupational Psychologist
BSc (Hons), MSc, Dip Psych, PhD, AFBPsS

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University of Worcester
Business School
City Campus
Castle Street, Worcester, WR1 3AS
Tel: 01905 85 5242
j.francis-smythe@worc.ac.uk

If you want to contact the Head of Information of the University of Worcester, with respect to GDPR and this study then please use the contact details below.

Head of Information Assurance
University of Worcester
Henwick Grove
Worcester WR2 6AJ
Email: infoassurance@worc.ac.uk
Tel: 01905 855014

Participants confirmation

You may print a copy of this information **sheet** and consent form for your records. Choosing "I confirm" below indicates that

- You confirm to understand the above information.
- You confirm to participate voluntarily.
- You confirm that you are working in the manufacturing industry in Germany.
- You confirm that you are working in a white-collar job (managing or administrative office-based job).

❑ I confirm

If you cannot confirm one or more of the statements above, please leave the survey through closing your web browser.

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INSTRUCTIONS
Please answer each of the questions by **marking an "X" in the box** and answer each question with **one single mark only**.

Some questions may ask you for an answer on a 5-point scale to indicate your response.

Fully agree	☐	☐	☐	☐	☐	fully disagree
	5	4	3	2	1	

We will ask you to generate your own unique participation code. This is a code you can generate yourself and it will be required if you want to communicate with the survey administrator to withdraw from the survey post completion. Please note that we can allow post completion withdrawal only for a period of two weeks after completion. Please do not choose a code like "1234". You may want to assure that the code is unique to you. We recommend therefore a mixture of alphabetic characters, numbers and symbols. If the code is not unique, we cannot assure a withdrawal after completion.

When we mention office, workspace or workplace, we mean the following:

Office = the building or buildings of your employer where your workspace is located
Workspace = the office room or the corridor your share with co-workers
Workplace = the area where you are doing your work, including your desk, chair, etc.

Participant Code

What is your own unique participant code? (please avoid a simple code like 1234).
Please make a note of your code and keep it at a safe place.

_____

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YOU AND YOUR JOB

These questions are about you and your current job

1. How old are you?
   - ☐ < 30
   - ☐ 31 – 40
   - ☐ 41 – 50
   - ☐ 51 >

2. Are you male or female?
   - ☐ M
   - ☐ F

3. Where is your most regular workplace located?
   - ☐ Your employer's office building
   - ☐ In home-office
   - ☐ Remotely from another office
   - ☐ Somewhere else

4. How would you assess the amount of travelling you do for your job?

Very high						Very low
	☐	☐	☐	☐	☐	
	5	4	3	2	1	

5. What is your highest educational level?
   - ☐ Hauptschulabschluss or equal
   - ☐ Mittlerer Abschluss or equal
   - ☐ Abgeschlossene Berufsausbildung or equal
   - ☐ Abgeschlossene Hochschulprüfung or equal

6. Would you say your employer allows you to take a break in your work when you want to?

Fully agree						Fully disagree
	☐	☐	☐	☐	☐	
	5	4	3	2	1	

7. Would you say your employer allows you to decide how long you want for the break?

Fully agree						Fully disagree
	☐	☐	☐	☐	☐	
	5	4	3	2	1	

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8. Which organizational position do you hold?
   - ☐ Administrative staff (e.g. Assistance, Customer Service)
   - ☐ Manager (Account Manager, Controller, Developer)
   - ☐ Senior Manager (Team-Leader, Key Account Manager)
   - ☐ Executive Manager (Head of Business, Country Manager)
   - ☐ Owner, Board Member or similar (CEO, CFO, COO)
   - ☐ Other white-collar job

9. Would you say you participate regularly in meetings away from your workplace?

Fully agree						Fully disagree
	☐	☐	☐	☐	☐	
	5	4	3	2	1	

10. How much of your working time, do you spend in meetings?

Very much						Very little
	☐	☐	☐	☐	☐	
	5	4	3	2	1	

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YOUR FRUIT AND VEGETABLE CONSUMPTION

Please tell us details about your fruit and vegetable consumption at your work place in the last six weeks.

11. How often did you eat fruit and vegetables when you are working?
    - ☐ Every day
    - ☐ Several times a week
    - ☐ Several times a month
    - ☐ Once a month or less
    - ☐ Never

12. How much fruit and vegetables did you consume in total during a working day?
    - ☐ I don't eat fruits and vegetables at work
    - ☐ Less than 50gr
    - ☐ 51 – 200gr
    - ☐ 201 – 400gr
    - ☐ 401 – 600gr

200gr fruits or vegetables are for instance:

0,5 broccoli	2 small apples	1 beef tomato
4 garden radish	2 bananas	2,5 potatoes
2 slices of melon	3 carrots	1 big orange

13. At what time of the day did you normally consume fruits and vegetables when you are working?
    - ☐ During the morning
    - ☐ For Lunch
    - ☐ During the afternoon
    - ☐ For Dinner
    - ☐ At various times during the day
    - ☐ I don't eat fruits and vegetable at work

14. Would you say that you like the taste of most fruits and vegetables?

Fully agree						Fully disagree
	☐	☐	☐	☐	☐	
	5	4	3	2	1	

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15. If you are thinking about trying to eat more fruit and vegetables at work, how confident are you that you can do it?

Very confident	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Very unconfident

16. Would you say you have enough time during your working hours to eat fruit and vegetables?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

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WORKPLACE CHARACTERISTICS

Think about your work environment and please tell us about its characteristics.
Please consider the last six weeks.

Consuming fruits and vegetables – availability

17. Do you have access to a canteen or similar when you are working?

Fully agree	☐	☐	☐	☐	☐	Fully disagree
	5	4	3	2	1	

18. How would you assess your acceptance of the canteen or similar as a place to eat?

Very high	☐	☐	☐	☐	☐	Very low
	5	4	3	2	1	

19. How would you assess the fruit and vegetable offering in the canteen or similar? (If you do not have access to a canteen or similar, you may skip this question).

Very good	☐	☐	☐	☐	☐	Very poor
	5	4	3	2	1	

20. Are fruit and vegetables offered during meetings as a snack?

Fully agree	☐	☐	☐	☐	☐	Fully disagree
	5	4	3	2	1	

21. Does your employer provide fruit and vegetables at different locations in the office? (If you are working in e.g. home-office, you may skip this question).

Fully agree	☐	☐	☐	☐	☐	Fully disagree
	5	4	3	2	1	

22. How do you consider the range of different fruits and vegetable types offered to you at work?

Very good	☐	☐	☐	☐	☐	Very poor
	5	4	3	2	1	

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Opportunities to prepare fruits and vegetables - accessibility

23. How do you assess the quality of the canteen's fruit and vegetable offering?

Very good	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Very poor

24. How would you assess your access to a place where you can prepare fruit and vegetable of your own when you are working (e.g. a kitchen)?

Very good	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Very poor

25. How well is the place equipped to prepare fruits and vegetables?

Very good	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Very poor

26. Would you say you have an increased desire to eat fruit and vegetables because of this place?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

27. Would you say you can recommend the place for preparing fruits and vegetables to co-workers?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

28. When you are working, would you say you can choose different fruit and vegetables to eat?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

29. Would you say that the cost of fruit and vegetables prevents you from eating them when you are working?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

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Workplace design

30. Would you say that your employer provides an appropriate modern workplace?
    Fully agree ☐ ☐ ☐ ☐ ☐ Fully disagree
    5 4 3 2 1

31. How do you rate the ergonomic configuration of your workplace, including for example your table, your chair and your computer equipment?
    Very good ☐ ☐ ☐ ☐ ☐ Very poor
    5 4 3 2 1

32. Do you think your workplace (e.g. your room or your desk) provide enough space, so that you can move around easily as well as handle all your documents and work equipment appropriately?
    Fully agree ☐ ☐ ☐ ☐ ☐ Fully disagree
    5 4 3 2 1

33. How do you assess the fresh air and the overall indoor climate in your workplace?
    Very good ☐ ☐ ☐ ☐ ☐ Very poor
    5 4 3 2 1

34. How do you assess the noise in your workplace?
    Very good ☐ ☐ ☐ ☐ ☐ Very poor
    5 4 3 2 1

35. Would you say the design of your workplace provides an environment supportive of fruit and vegetable consumption?
    Fully agree ☐ ☐ ☐ ☐ ☐ Fully disagree
    5 4 3 2 1

36. Would you say the design of your workplace encourages you to consume fruit and vegetables?
    Fully agree ☐ ☐ ☐ ☐ ☐ Fully disagree
    5 4 3 2 1

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Social climate at work

37. Do you feel your work is important?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

38. Do you strive to achieve successful work outcomes?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

39. Does your employer pay attention to how well the team is working together?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

40. Would you say you feel valued by or employer?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

41. Would you say your boss provides you with support when needed?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

42. How would you describe the collaboration between you and your co-workers?

Very good	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Very poor

43. How would you assess the healthy food and eating conditions when you are working?

Very good	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Very poor

44. Would you say your employer cares about your fruit and vegetable intake?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

45. Would you say your co-workers care about your health?

Fully agree	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1	Fully disagree

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46. Do you talk to your co-workers about the benefits, taste or consumption of fruit and vegetables?

Fully agree ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 Fully disagree

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Communication

47. Would you say your employer shares general information about the organization?
Fully agree ☐ ☐ ☐ ☐ ☐ Fully disagree
5 4 3 2 1

48. How do you assess the quality of this general communication?
Very good ☐ ☐ ☐ ☐ ☐ Very poor
5 4 3 2 1

49. How satisfied are you with your employer's efforts to keep you informed about the organization?
Very satisfied ☐ ☐ ☐ ☐ ☐ Very unsatisfied
5 4 3 2 1

50. Would you say your company shares regular information about fruit and vegetable consumption in general?
Fully agree ☐ ☐ ☐ ☐ ☐ Fully disagree
5 4 3 2 1

51. Would you say your company explains the benefits of fruit and vegetable consumption?
Fully agree ☐ ☐ ☐ ☐ ☐ Fully disagree
5 4 3 2 1

52. How do you assess the quality of this specific fruit and vegetable communication?
Very good ☐ ☐ ☐ ☐ ☐ Very poor
5 4 3 2 1

53. How satisfied are you with your employer's efforts to keep you informed about opportunities to consume and prepare fruit and vegetables when you are working?
Very satisfied ☐ ☐ ☐ ☐ ☐ Very unsatisfied
5 4 3 2 1

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WORKPLACE REQUIREMENTS

Think about your workplace, your workspace and your office at your current employer.

54. Are there any barriers in your workplace preventing you from eating fruit and vegetables at work? (Workplace = the area where you are doing your work, including your desk, chair, etc.)

55. Are there any barriers in your workspace preventing you from eating fruit and vegetables at work? (Workspace = the office room or the corridor your share with co-workers)

56. Are there any barriers in your office preventing you from eating fruit and vegetables at work? (Office = the building or buildings of your employer where your workspace is located)

57. Does your employer provide any particular workplace conditions that encourage you to eat fruit and vegetables? If so, which?

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58. Which intervention would you recommend specifically towards the conditions of the physical workplace influencing your fruit and vegetables consumption?

59. Which intervention would you recommend specifically towards the conditions of the psychosocial workplace (non-physical workplace) influencing your fruit and vegetables consumption?

60. Can you think about any other support required from your employer for your fruit and vegetable intake?

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If you want to participate in the draw for an Amazon voucher of 50 Euros, please provide your email address here:

If you want to receive a download link to the approved thesis, please provide your email address here:

If you want to receive a download link to the executive summary of the approved thesis, please provide your email address here:

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Debrief of survey: This debrief will be shown in the third section of the webpage after the survey questions. After completing the questions all participants will be shown this debrief.

The relevance of using the work environment for an intervention to increase employees fruit and vegetable consumption is seen in a study executed between 2007 and 2009 in Southeastern Brazil. It was found out that environmental changes such as food dish appearance, improvements in presentation, organizational and attractiveness of fruit and vegetable dishes or educational aspects have a positive effect on the fruit and vegetable consumption (Franco, De Castro and Wolkoff 2013).

Changes in the workplace environment like air-conditioning, new tables or a better quality of the canteen, require financial investment , which leads to management expectations. Naturally, a business organization is calculating a return of investment before costs are approved (Chipma 2018; Weil 2010). The costs of presenteeism receive therefore significant attention as fruit and vegetables or other low fat products are reducing the likelihood of presenteeism by more than 90% (Merrill et al. 2012). Presenteeism is a cost factor due to the loss of productivity, when employees are working while they are sick or not able to perform as usually (Chiara Ardito et al. 2012; Yang, Zhu and Xie 2016). Such costs are confirmed as of 2.399 Euro per employee per year (Maar and Fricker 2011).

The costs of presenteeism might be reduced through a transformation of the workplace characteristics achieving an increased fruit and vegetable consumption (Merrill et al. 2012). The research is exploring different workplace characteristics and is therefore aimed to be in favor of the employees. As costs are a key element towards organizational profitability (Voiculescu and Yanacopulos 2011), the return on investments into the workplace might be based on the results of this survey and allows managers to justify financially workplace transformations. The research assesses therefore the workplace characteristics supporting employees' fruit and vegetable consumption. The study is not designed to evaluate an individual's fruit and vegetable consumption nor to provide any recommendations in this respect. It simply seeks to identify those workplace characteristics which can help promote workplace fruit and vegetable consumption.

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Useful Links

If you want to learn more about healthy eating / wellbeing, you may find the following websites helpful:

https://www.bzfe.de
https://www.dge.de

Appendix 3 - Manipulated Data

This table shows the manipulated data to avoid negative wording the data evaluation process.

Table 26
Overview of the manipulated data to avoid negative wording in the data analysis process

Variable	Initial Value ranking	New Value ranking
Consumption	1 = I don't eat fruit and vegetables at work 2 = Less than 50gr 3 = 51 – 200gr 4 = 201 – 400gr 5 = 401 – 600gr 6 = more than 600gr	1 = more than 600gr 2 = 401 – 600gr 3 = 201 – 400gr 4 = 51 – 200gr 5 = Less than 50gr 6 = I don't eat fruit and vegetables at work
Day Time	1 = During the morning 2 = For Lunch 3 = During the afternoon 4 = For Dinner 5 = At various times during the day 6 = I don't eat fruit and vegetables at work	1 = At various times during the day 2 = During the morning 3 = For Lunch 4 = During the afternoon 5 = For Dinner 6 = I don't eat fruit and vegetables at work

Table 26 - Manipulated Data

Appendix 4 - SPSS Codebook

IBM SPSS Web Report - Codebook 16072020.spv

Log

Log - Log - July 16, 2020

```
DISPLAY DICTIONARY.
```

File Information

File Information - Variable Information - July 16, 2020

Variable Information

Variable	Position	Label	Measurement Level	Role	Column Width	Alignment	Print Format	Write Format
id	1	Identification number	Scale	Input	8	Right	F8	F8
Age	2	Age	Ordinal	Input	8	Right	F8	F8
sex	3	Sex	Nominal	Input	8	Right	F8	F8
Loc	4	Workplace location	Nominal	Input	8	Right	F8	F8
Trav	5	travelling for work	Ordinal	Input	8	Right	F8	F8
Educ	6	Education level	Ordinal	Input	8	Right	F8	F8
Bre	7	Break allowed	Ordinal	Input	8	Right	F8	F8
BreTi	8	Break time	Ordinal	Input	8	Right	F8	F8
OrPo	9	Organizational Position	Nominal	Input	8	Right	F8	F8
OrPo_grouped	10	Organizational Position grouped	Nominal	Input	9	Right	F8	F8
Met	11	Meetings away from workplace	Ordinal	Input	8	Right	F8	F8
MetTi	12	Time in meetings	Ordinal	Input	8	Right	F8	F8
Can	13	Canteen access	Ordinal	Input	8	Right	F8	F8
Eat	14	Eat F&V at work	Ordinal	Input	8	Right	F8	F8
Con2	15	Consumption F&V	Ordinal	Input	12	Right	F8	F8
DaTi2	16	DayTime2	Nominal	Input	10	Right	F8	F8
Tas	17	Liking taste of F&V	Ordinal	Input	8	Right	F8	F8
Confi	18	Confidence eating more F&V	Ordinal	Input	8	Right	F8	F8
Time								

	19	Time to eat F&V	Ordinal	Input	8	Right	F8	F8
Con	20	Consumption F&V	Ordinal	Input	12	Right	F8	F8
DaTi	21	Day time consuming F&V	Nominal	Input	8	Right	F8	F8
Acc	22	Acceptance canteen	Ordinal	Input	8	Right	F8	F8
FVO	23	F&V offering canteen	Ordinal	Input	8	Right	F8	F8
FVM	24	F&V offered during meeting	Ordinal	Input	8	Right	F8	F8
FVL	25	F&V at different locations	Ordinal	Input	8	Right	F8	F8
RFV	26	Range of F&V	Ordinal	Input	8	Right	F8	F8
Qul	27	Quality of canteen F&V offering	Ordinal	Input	8	Right	F8	F8
AcPi	28	Access to a place preparing F&V	Ordinal	Input	8	Right	F8	F8
Equip	29	Equipment prepaing F&V	Ordinal	Input	8	Right	F8	F8
Dis	30	Increased desire	Ordinal	Input	8	Right	F8	F8
Rec	31	Recommed the place preparing F&V	Ordinal	Input	8	Right	F8	F8
Cho	32	Choosing from different F&V at work	Ordinal	Input	8	Right	F8	F8
Cost	33	Costs of F&V prevents from consumption	Ordinal	Input	8	Right	F8	F8
ModWp	34	Modern workplace provided	Ordinal	Input	8	Right	F8	F8
Ergo	35	Ergonomic configuration of workplace	Ordinal	Input	8	Right	F8	F8
Spc	36	Enough space at workplace	Ordinal	Input	8	Right	F8	F8
Clim	37	Fresh air and indoor climate	Ordinal	Input	8	Right	F8	F8
Noise	38	Noise at workplace	Ordinal	Input	8	Right	F8	F8
Env	39	Environment supports F&V consumption	Ordinal	Input	8	Right	F8	F8

Des	40	Design wrokplace encourages F&V consumption	Ordinal	Input	8	Right	F8	F8
Imp	41	work is important	Ordinal	Input	8	Right	F8	F8
Out	42	strive work outcomes	Ordinal	Input	8	Right	F8	F8
Tog	43	team is working together	Ordinal	Input	8	Right	F8	F8
Val	44	Valued by employer	Ordinal	Input	8	Right	F8	F8
Sup	45	Boss provides support	Ordinal	Input	8	Right	F8	F8
Col	46	Collaboration with co-workers	Ordinal	Input	8	Right	F8	F8
Cond	47	Healthy food and eating conditions	Ordinal	Input	8	Right	F8	F8
Emp	48	Employer cares about F&V intake	Ordinal	Input	8	Right	F8	F8
Cow	49	Co-workers care about health	Ordinal	Input	8	Right	F8	F8
Ben	50	Talking to co-workers about F&V benefits	Ordinal	Input	8	Right	F8	F8
GenIn	51	General information are shared	Ordinal	Input	8	Right	F8	F8
InQual	52	Quality of general information	Ordinal	Input	8	Right	F8	F8
Eff	53	Emplyer efforts to inform	Ordinal	Input	8	Right	F8	F8
Reg	54	Regular information about F&V	Ordinal	Input	8	Right	F8	F8
Exp	55	Benefits of F&V are explained	Ordinal	Input	8	Right	F8	F8
FVC	56	Quality of F&V communication	Ordinal	Input	8	Right	F8	F8
Opp	57	Efforts to inform about F&V intake opportunities	Ordinal	Input	8	Right	F8	F8
AVA	58	Availability	Scale	Input	10	Right	F8.2	F8.2
ACE	59	Accessibility	Scale	Input	10	Right	F8.2	F8.2
WOP	60	Workplace Design	Scale	Input	10	Right	F8.2	F8.2

SOC	61	Social Climate	Scale	Input	10	Right	F8.2	F8.2
COM	62	Communication	Scale	Input	10	Right	F8.2	F8.2
FVI	63	F&V Intake	Scale	Input	10	Right	F8.2	F8.2
Tim	64	Time	Nominal	Input	8	Right	F8.2	F8.2
HygCon	65	Hygienic conditions	Nominal	Input	8	Right	F8.2	F8.2
Rules	66	Rules	Nominal	Input	8	Right	F8.2	F8.2
Costs	67	Costs	Nominal	Input	8	Right	F8.2	F8.2
Dist	68	Distance	Nominal	Input	8	Right	F8.2	F8.2
LoungM	69	Lounge missing	Nominal	Input	8	Right	F8.2	F8.2
Stor	70	Storing	Nominal	Input	8	Right	F8.2	F8.2
Health	71	Health checks	Nominal	Input	8	Right	F8.2	F8.2
Sport	72	Sport offerings	Nominal	Input	8	Right	F8.2	F8.2
Outside	73	Outside eating	Nominal	Input	8	Right	F8.2	F8.2
Free	74	Free F&V products	Nominal	Input	8	Right	F8.2	F8.2
JoinedC	75	Joined cooking	Nominal	Input	8	Right	F8.2	F8.2

Variables in the working file

File Information

File Information - Variable Values - July 16, 2020

Variable Values

Value		Label
id	1	Male
	2	Female
Age	1	<30
	2	31-40
	3	41-50
	4	50>
sex	1	Male
	2	Female
Loc	1	Employer's office building
	2	HomeOffice
	3	Remotely from another office
	4	Somewhere else
Trav	1	very high
	2	high
	3	medium
	4	low
	5	very low
Educ	1	Hauptschulabschluss or equal
	2	Mittlerer Abschluss or equal
	3	Abgeschlossene Berufsausbildung or equal
	4	Abgeschlossene Hochschulpürfung or equal
Bre	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree

BreTi	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
OrPo	1	Administraive staff
	2	Manager
	3	Senior Manager
	4	Executive Manager
	5	Owner, Board Member or similar
	6	Other white-collar job
OrPo_grouped	1	Administraive staff
	2	Manager
	3	Other white-collar job
Met	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
MetTi	1	very much
	2	much
	3	medium
	4	little
	5	very little
Can	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Eat	1	Every day
	2	Several times a week
	3	Several times a month
	4	Once a month or less
	5	Never
Con2	1	more than 600gr
	2	401-600gr
	3	201-400gr
	4	51-200gr
	5	Less than 50gr
	6	I don't eat fruits and vegetables at work
DaTi2	1	At various tines during the day
	2	During the morning
	3	For Lunch
	4	During the afternoon
	5	For Dinner
	6	I don't eat fruits and vegetables at work
Tas	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Confi	1	very confident

	2	confident
	3	medium
	4	unconfident
	5	very unconfident
Time	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Con	1	I don't eat fruits and vegetables at work
	2	Less than 50gr
	3	51-200gr
	4	201-400gr
	5	401-600gr
	6	more than 600gr
DaTi	1	During the morning
	2	For Lunch
	3	During the afternoon
	4	For Dinner
	5	At various tines during the day
	6	I don't eat fruits and vegetables at work
Acc	1	very high
	2	high
	3	medium
	4	low
	5	very low
FVO	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
FVM	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
FVL	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
RFV	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Qul	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
AcPi	1	very good

	2	good
	3	medium
	4	poor
	5	very poor
Equip	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Dis	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Rec	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Cho	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Cost	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
ModWp	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Ergo	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Spc	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Clim	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Noise	1	very good
	2	good
	3	medium
	4	poor

	5	very poor
Env	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Des	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Imp	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Out	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Tog	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Val	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Sup	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Col	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Cond	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Emp	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Cow	1	fully agree
	2	agree
	3	medium

	4	disagree
	5	full disagree
Ben	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
GenIn	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
InQual	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Eff	1	very satisfied
	2	satisfied
	3	medium
	4	unsatisfied
	5	very unsatisfied
Reg	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
Exp	1	fully agree
	2	agree
	3	medium
	4	disagree
	5	full disagree
FVC	1	very good
	2	good
	3	medium
	4	poor
	5	very poor
Opp	1	very satisfied
	2	satisfied
	3	medium
	4	unsatisfied
	5	very unsatisfied
Tim	1,00	no
	2,00	yes
HygCon	1,00	no
	2,00	yes
Rules	1,00	no
	2,00	yes
Costs	1,00	no
	2,00	yes
Dist	1,00	no
	2,00	yes
LoungM	1,00	no
	2,00	yes

Stor	1,00	no
	2,00	yes
Health	1,00	no
	2,00	yes
Sport	1,00	no
	2,00	yes
Outside	1,00	no
	2,00	yes
Free	1,00	no
	2,00	yes
JoinedC	1,00	no
	2,00	yes

Appendix 5 - Response to Survey

In total 452 participants joined the survey, which existed of 60 questions. The following diagram shows in which order the following tables must be.

A1	B1	C1
A2	B2	C2
A3	B3	C3
A4	B4	C4
A5	B5	C5
A6	B6	C6

id	Age	sex	Loc	Trav	Educ	Bre	BreTi	OrPo	OrPo_grou	Met	MetTi	Can	Eat	Con2	DaTi2	Tas	Confi	Time	Con	DaTi	Acc	FVO	FVM	FVL	RFV	Qui	AcPi	Equip	Dis
54485529	1	1	1	1	3	4	2	2	2	2	1	2	2	2	2	4	2	1	2	5	3	1	4	4	5	4	2	2	3
54486348	1	1	1	1	5	4	2	2	2	2	2	3	2	2	4	4	1	2	1	3	3	2	4	4	5	5	5	3	3
54488260	2	2	2	1	4	4	1	2	2	2	3	3	1	1	1	1	1	2	1	6	5	2	5	5	5	5	1	1	3
54488832	1	2	1	1	4	4	1	2	2	2	3	3	1	1	3	4	2	1	3	4	3	3	5	4	4	4	3	2	4
54488345	3	1	1	1	3	4	2	2	3	2	2	3	1	2	4	4	2	1	2	3	3	2	4	3	3	3	2	4	4
54492419	1	1	1	1	5	4	1	1	6	3	2	5	1	4	5	4	1	4	3	2	3	3	4	5	5	4	2	2	2
54494032	1	1	1	1	5	3	1	2	2	2	1	5	1	2	4	4	3	2	1	3	3	3	4	4	3	3	2	2	5
54498315																													
54499869	1	2	1	1	4	3	2	3	1	2	4	4	1	2	4	1	2	3	4	3	5	4	4	4	4	4	2	2	5
54500995																													
54505591	3	2	2	1	4	4	1	1	2	1	1	4	1	1	3	5	4	1	1	4	5	3	4	3	4	2	3	4	5
54508652	1	2	2	1	5	4	1	1	2	2	1	3	1	3	5	4	1	3	1	2	3	2	5	5	5	5	3	4	4
54518334	1	2	2	1	5	4	1	1	2	2	1	3	1	2	4	3	1	3	2	3	2	2	5	5	5	5	3	3	4
54519762	1	2	1	1	3	4	1	1	3	2	2	3	1	2	3	3	1	3	2	4	3	2	4	4	5	3	2	3	5
54519983	1	2	2	1	5	4	1	1	3	2	3	4	1	2	4	4	2	2	2	3	3	2	4	4	5	3	2	1	4
54537001	2	2	2	1	5	4	1	1	3	2	3	4	1	2	5	4	2	2	3	2	3	2	4	4	5	3	2	1	5
54537007	2	2	2	1	5	4	1	1	3	2	3	4	1	2	4	4	2	2	3	2	3	2	4	4	5	3	2	1	5
54539624	2	1	2	1	2	4	1	1	4	2	2	2	1	1	4	4	1	1	1	5	3	2	5	5	5	3	2	2	4
54556012	4	1	2	1	4	4	1	2	4	2	1	2	1	1	2	2	1	2	1	5	3	2	5	5	5	4	2	4	4
54568397	1	2	2	1	3	4	1	2	2	2	1	4	1	4	5	3	3	3	2	2	3	2	4	3	3	2	2	2	4
54572453																													
54588079	2	1	1	1	3	4	1	1	6	3	1	1	1	1	4	3	1	1	1	3	2	2	5	5	5	1	1	2	5
54590006	4	2	1	1	2	4	1	1	4	2	1	1	1	2	4	5	1	3	1	3	4	1	5	3	3	2	4	2	1
54608621	2	2	2	1	5	4	1	1	1	3	1	3	1	2	3	2	1	2	1	4	1	2	5	5	5	4	2	2	2
54612991	1	2	2	1	5	4	1	1	1	2	2	4	1	2	3	3	1	2	2	4	2	1	4	4	4	4	2	2	4
54613023	1	2	2	1	3	4	1	2	6	3	2	2	1	2	2	2	1	3	3	5	2	1	4	4	4	4	2	1	1
54613189	1	2	2	1	5	4	2	3	6	3	4	4	4	5	4	4	4	3	3	2	3	3	5	4	4	3	2	3	5
54613412	1	1	1	1	3	4	1	2	2	2	3	4	1	1	3	4	1	2	3	4	3	2	5	4	4	3	2	4	4
54613447	1	2	2	1	4	4	2	2	1	2	3	4	2	2	4	4	1	2	2	3	3	2	4	4	5	3	2	2	3
54613517																													
54613640																													
54613933																													
54613965	1	2	1	1	5	3	1	3	6	3	3	3	1	2	4	1	1	2	1	3	5	3	4	3	4	1	1	1	4
54615103	4	1	1	2	2	4	1	1	4	2	2	2	1	4	4	1	2	2	1	3	5	3	4	2	1	1	1	1	3
54615296																													
54617188																													
54629086	1	2	1	1	5	5	3	4	1	1	4	3	2	2	3	3	1	2	3	4	2	2	5	4	4	2	2	4	4
54636639																													
54638690	1	1	1	1	4	3	2	3	6	3	5	5	2	4	4	2	2	2	1	3	1	2	5	3	3	2	2	4	3
54639582	2	2	1	1	4	4	1	2	4	2	2	3	2	2	4	3	2	1	2	3	2	1	3	2	2	1	1	3	3
54639702	3	2	1	1	3	4	1	2	3	2	2	2	1	2	4	1	2	2	1	3	5	2	5	4	4	3	1	4	4
54648005	2	2	1	1	4	4	1	2	2	1	3	3	5	3	4	1	4	2	1	3	5	3	5	4	4	3	1	4	4
54649400	1	1	1	1	5	4	1	2	1	1	1	2	1	1	4	2	4	2	1	3	3	1	5	4	4	4	2	5	5
54650757	1	1	1	1	4	3	2	3	6	3	4	4	5	3	4	2	2	1	1	3	3	1	4	3	3	2	2	2	4
54675549	1	1	1	1	5	3	2	2	2	2	4	4	1	2	4	2	1	2	1	3	3	1	4	3	3	2	2	4	4
54682793	4	1	1	1	3	3	1	3	4	2	2	4	1	2	3	3	1	2	1	4	3	2	5	4	5	3	2	4	5
54715257	1	2	1	1	2	4	1	2	2	2	1	2	1	2	4	2	1	3	1	3	5	3	5	5	5	4	2	4	5
54727057	2	2	1	1	4	4	1	1	2	2	4	2	1	2	4	1	3	1	3	3	5	3	5	5	5	4	4	4	5
54760256	2	1	1	1	3	4	1	2	2	2	2	3	5	4	5	3	3	2	3	2	2	1	5	5	5	3	4	4	5
54796596																													
54807427	2	2	1	1	3	4	2	2	2	2	2	2	2	2	4	2	2	3	2	3	1	2	4	4	4	2	1	1	1
54835275	3	2	1	1	4	3	1	1	1	2	2	2	1	1	3	3	1	1	1	4	2	2	5	5	5	2	2	2	4
54838539	2	1	2	1	1	4	1	1	3	2	2	4	5	2	2	1	2	1	1	5	2	1	5	5	5	3	1	1	3
54839510	4	1	2	1	2	4	1	1	5	3	2	1	2	1	3	2	1	3	1	4	2	1	5	3	3	1	1	3	3
54843856	1	2	1	1	4	4	1	2	6	3	1	4	1	2	3	2	1	2	1	4	2	1	4	4	5	3	2	1	5
54850077	3	1	1	1	4	4	2	2	6	3	2	2	1	2	3	1	1	2	1	4	5	1	4	2	1	2	1	1	4
54850082	3	2	1	2	4	4	1	2	3	2	1	3	1	3	3	1	1	2	1	4	5	1	5	3	3	2	2	2	4
54863277																													
54870356	2	1	1	1	2	4	1	1	4	2	2	2	1	1	2	2	1	1	1	5	3	1	1	2	5	4	1	1	1
54884061	2	2	1	1	3	4	1	1	1	2	1	2	1	2	4	4	1	1	1	3	3	2	4	4	5	4	1	1	3
54885947	3	2	2	1	3	4	1	1	3	2	1	2	1	2	4	3	1	1	1	3	2	3	3	2	2	1	1	2	3
54887023	2	1	1	1	3	4	2	2	2	2	2	5	2	2	4	2	2	3	2	3	3	1	5	5	5	3	2	4	3
54893998	3	2	1	1	2	4	2	1	4	2	3	4	1	2	3	3	1	2	2	4	3	2	5	3	3	2	2	4	4
54896930	3	2	1	1	2	4	1	1	4	2	3	2	1	2	4	1	2	2	1	3	3	2	5	3	3	1	1	1	3
54897122	2	1	1	1	4	4	1	2	2	2	1	2	1	2	3	2	2	2	1	4	3	1	4	3	3	1	1	1	3
54899573	1	2	1	1	3	4	1	2	2	2	2	2	1	2	3	2	2	1	1	4	3	2	4	3	3	1	1	3	4
54909229	1	2	1	1	5	4	2	2	2	2	3	2	1	2	4	1	2	1	2	4	3	2	5	4	4	3	1	4	4
54912211	2	1	1	2	2	4	2	2	4	2	2	1	1	1	3	3	2	2	2	4	3	2	5	4	4	3	2	5	5
54925056	1	2	1	1	4	4	2	2	2	2	2	2	1	1	4	2	1	3	2	4	3	1	4	3	3	2	2	5	5
54928145	1	2	1	1	5	4	1	2	1	2	2	2	1	1	4	3	1	3	2	4	3	2	5	4	5	3	2	1	5
54938651	2	1	1	1	5	4	1	2	5	2	2	2	1	2	4	4	1	2	1	4	3	2	5	4	5	3	2	1	5
54938685	1	2	1	1	5	4	1	1	2	2	1	2	1	2	4	4	1	1	1	6	4	2	5	3	3	2	2	1	4
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54952760																													
54953313	3	1	2	2	4	4	1	2	2	2	5	4	5	5	4	5	1	4	1	3	4	1	5	5	5	1	1	1	4
54971894	2	2	1	2	2	4	1	3	2	2	2	2	1	4	4	3	1	1	1	3	5	1	3	3	1	1	1	2	1
54980050																													

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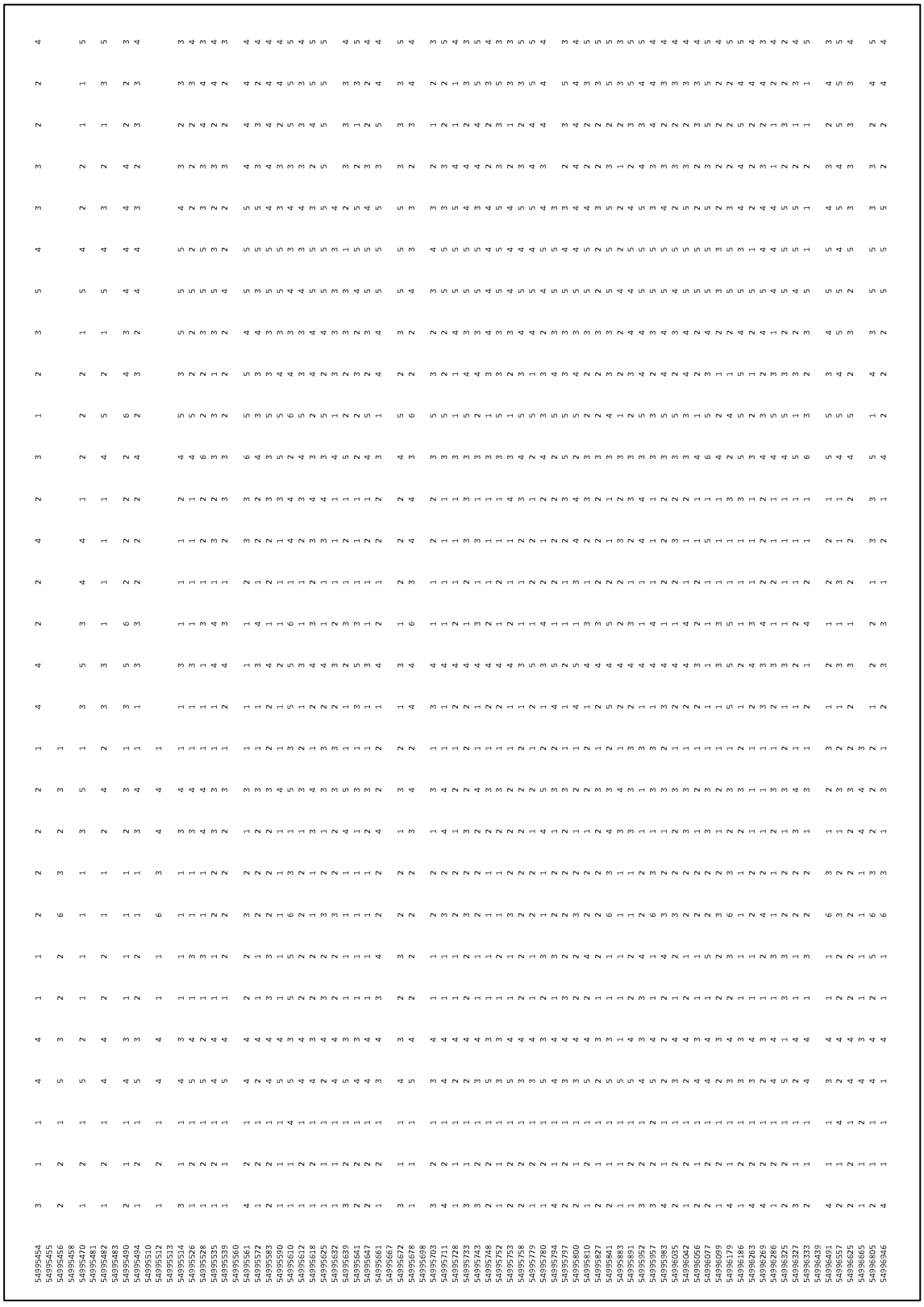

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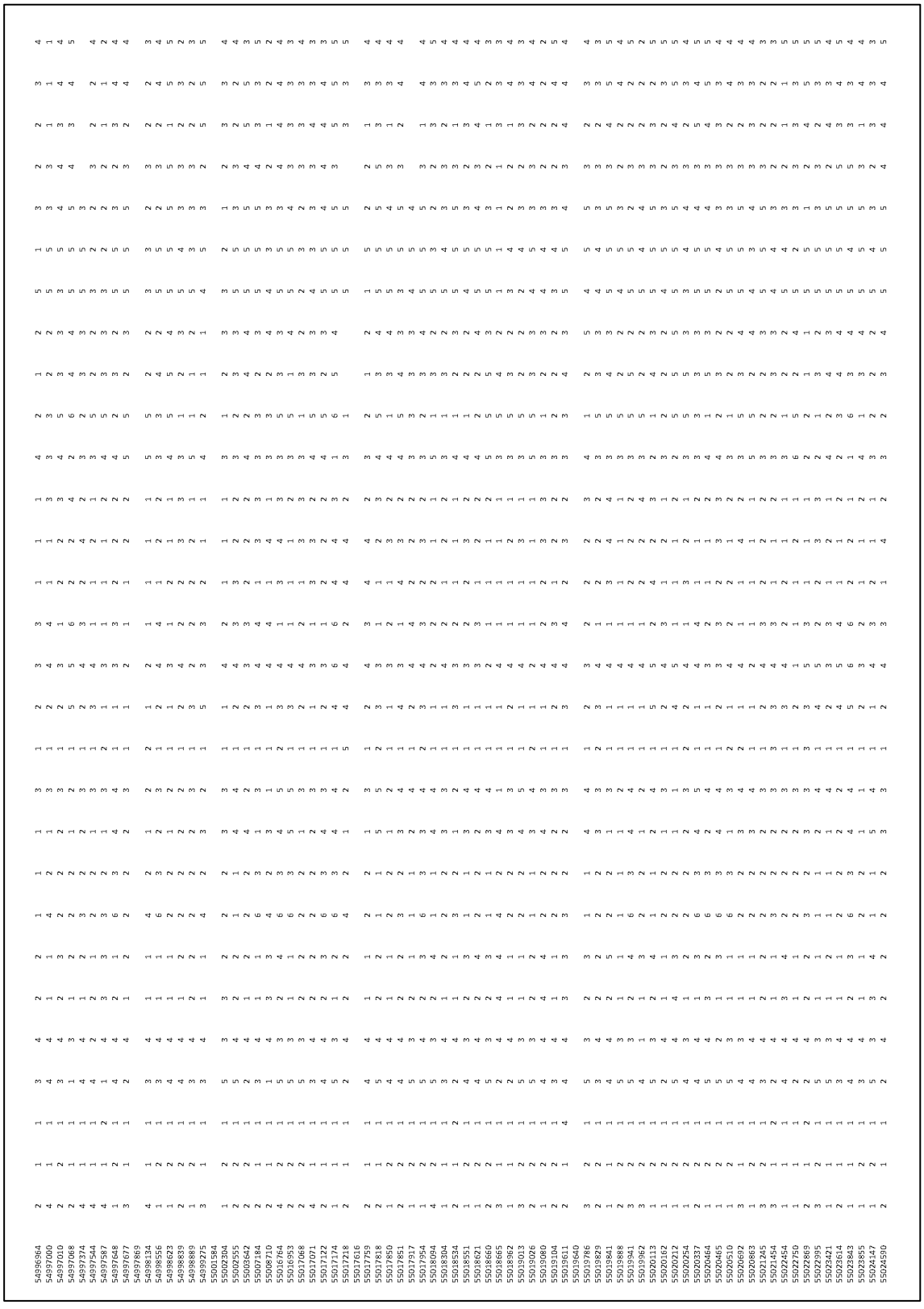

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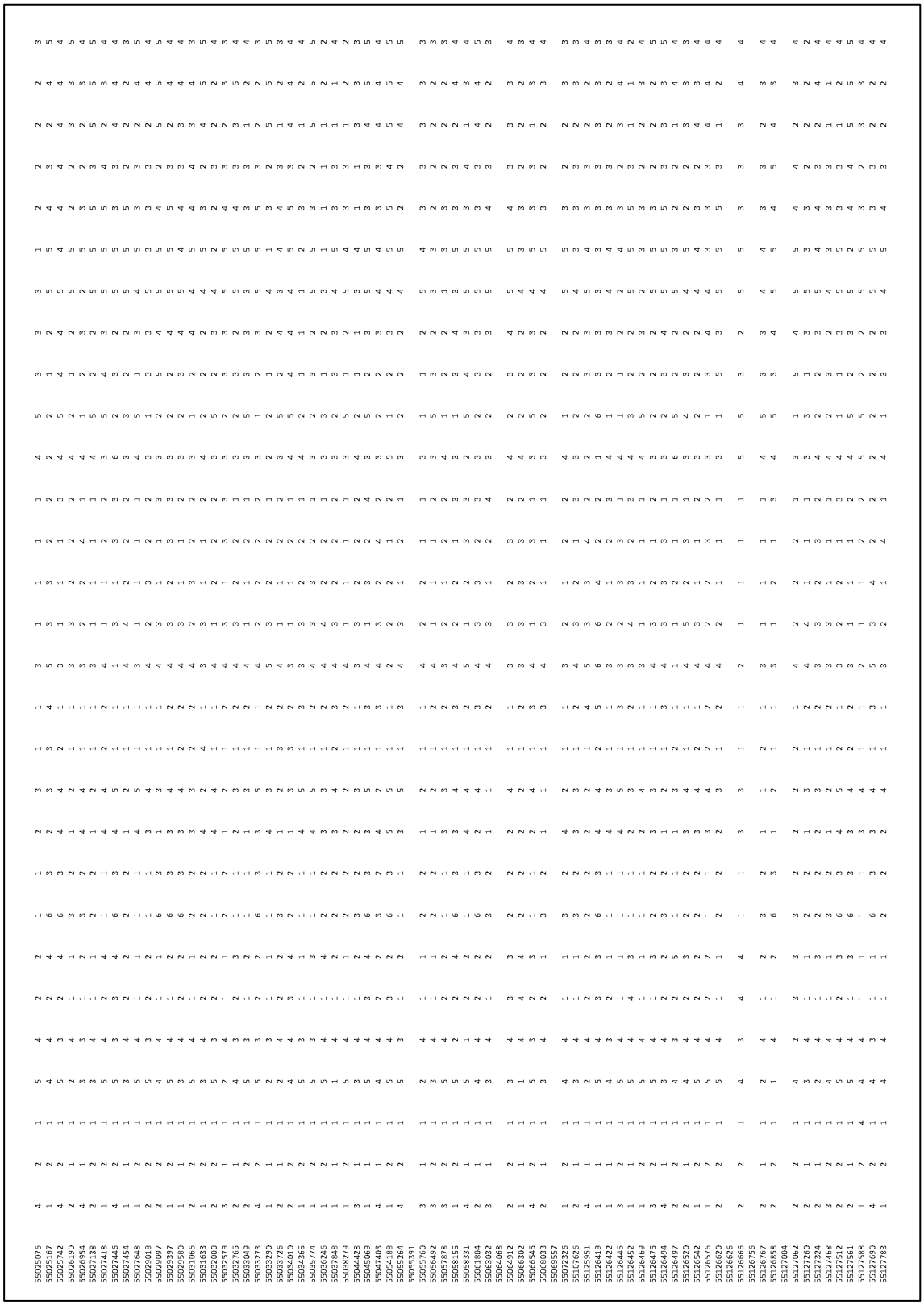

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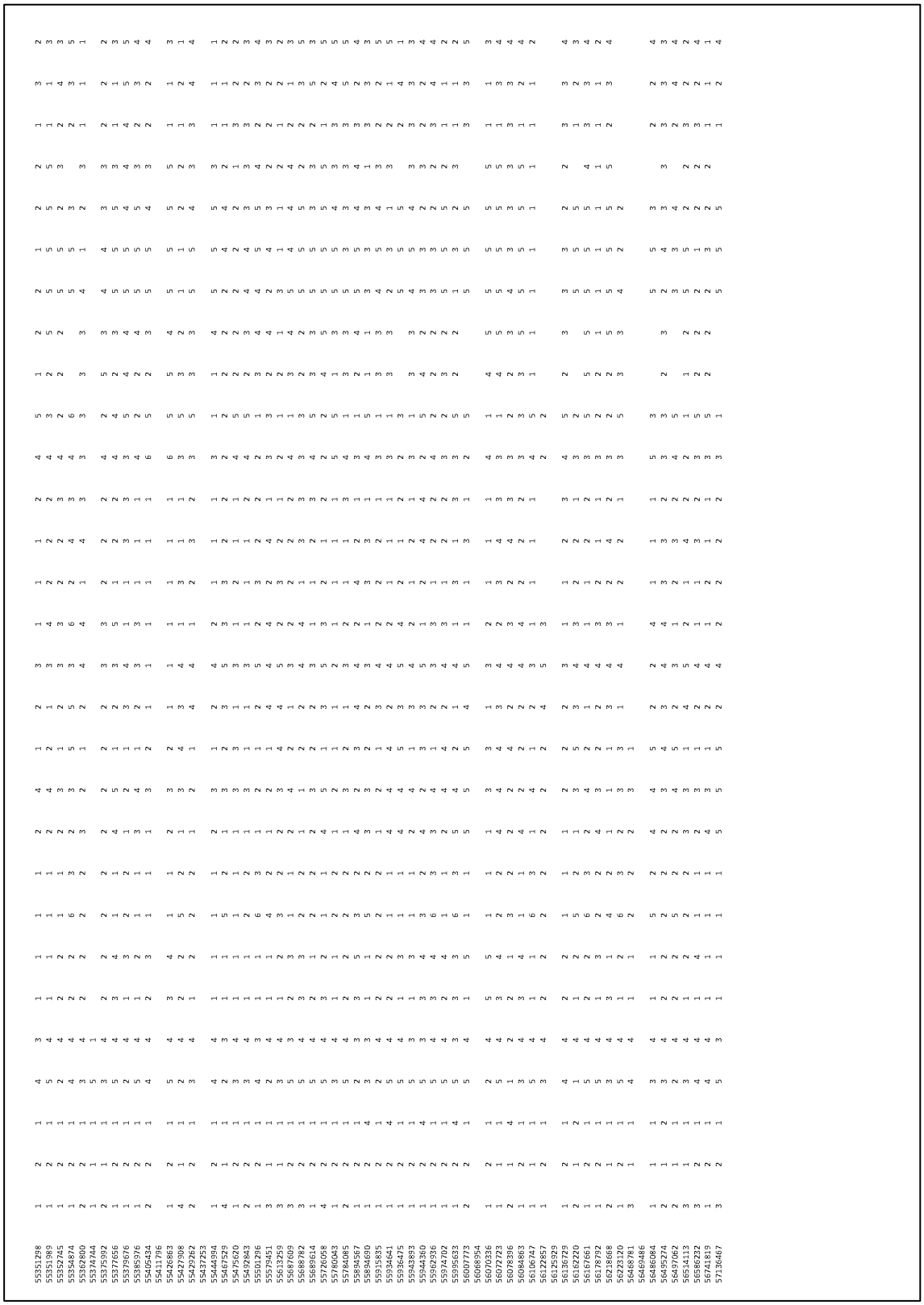

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Rec	Cho	Cost	ModWp	Ergo	Spc	Clim	Noise	Env	Des	Imp	Out	Tog	Val	Sup	Col	Cond	Emp	Cow	Ben	GenIn	InQual	Eff	Reg	Exp	PVC	Opp	AVA	ACE	WOP
																											4,00	2,00	2,00
4	3	3	2	2	2	2	4	3	3	4	3	1	3	2	1	1	2	4	5	5	2	3	2	5	5	4	3	5,00	3,00
4	3	5	2	2	2	2	4	4	4	4	3	1	2	2	1	1	2	5	4	5	2	2	2	2	5	5	4	5,00	3,00
4	4	3	4	2	3	2	2	3	4	4	2	1	1	2	1	1	3	5	4	1	1	2	2	5	5	5	4	4,00	3,00
4	4	3	4	2	3	2	2	3	4	4	2	1	1	2	1	1	2	3	2	2	1	2	2	5	5	5	4	4,00	3,00
4	4	3	4	3	3	2	2	3	4	4	2	1	1	2	1	1	2	4	3	3	2	2	2	5	5	4	3	4,00	3,00
4	4	3	4	2	3	2	2	3	4	4	2	1	1	2	1	1	2	4	3	4	2	2	2	5	5	5	3	4,00	2,50
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3	2	4	3	3	4	2	3	4	5	4	2	1	3	3	2	3	4	4	2	4	1	2	2	2	2	2	2	4,00	4,00
																												3,00	
3	1	2	5	1	2	2	3	5	3	4	1	1	1	1	1	1	2	4	2	3	2	3	3	5	5	5	4	3,00	5,00
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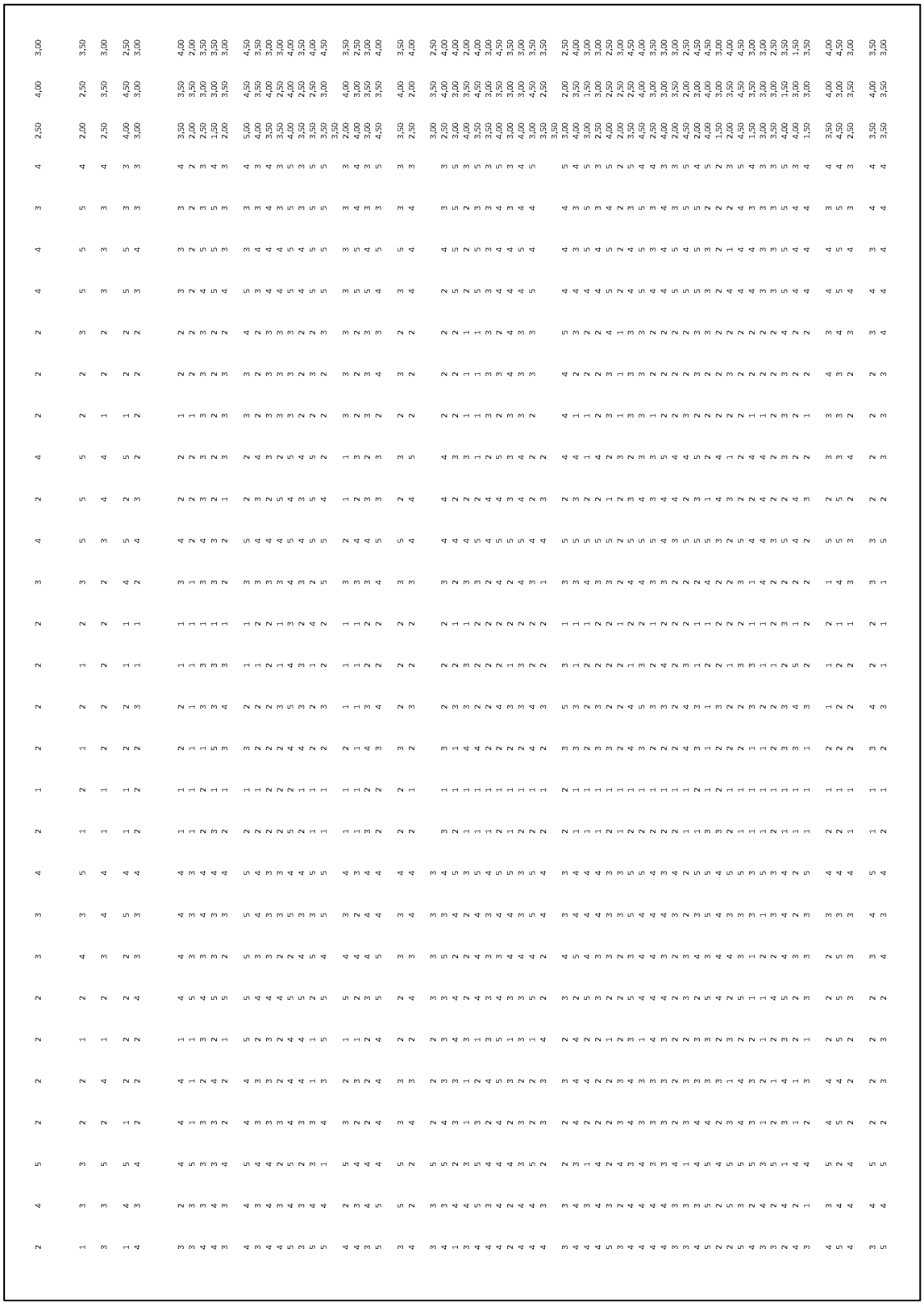
2	4	4



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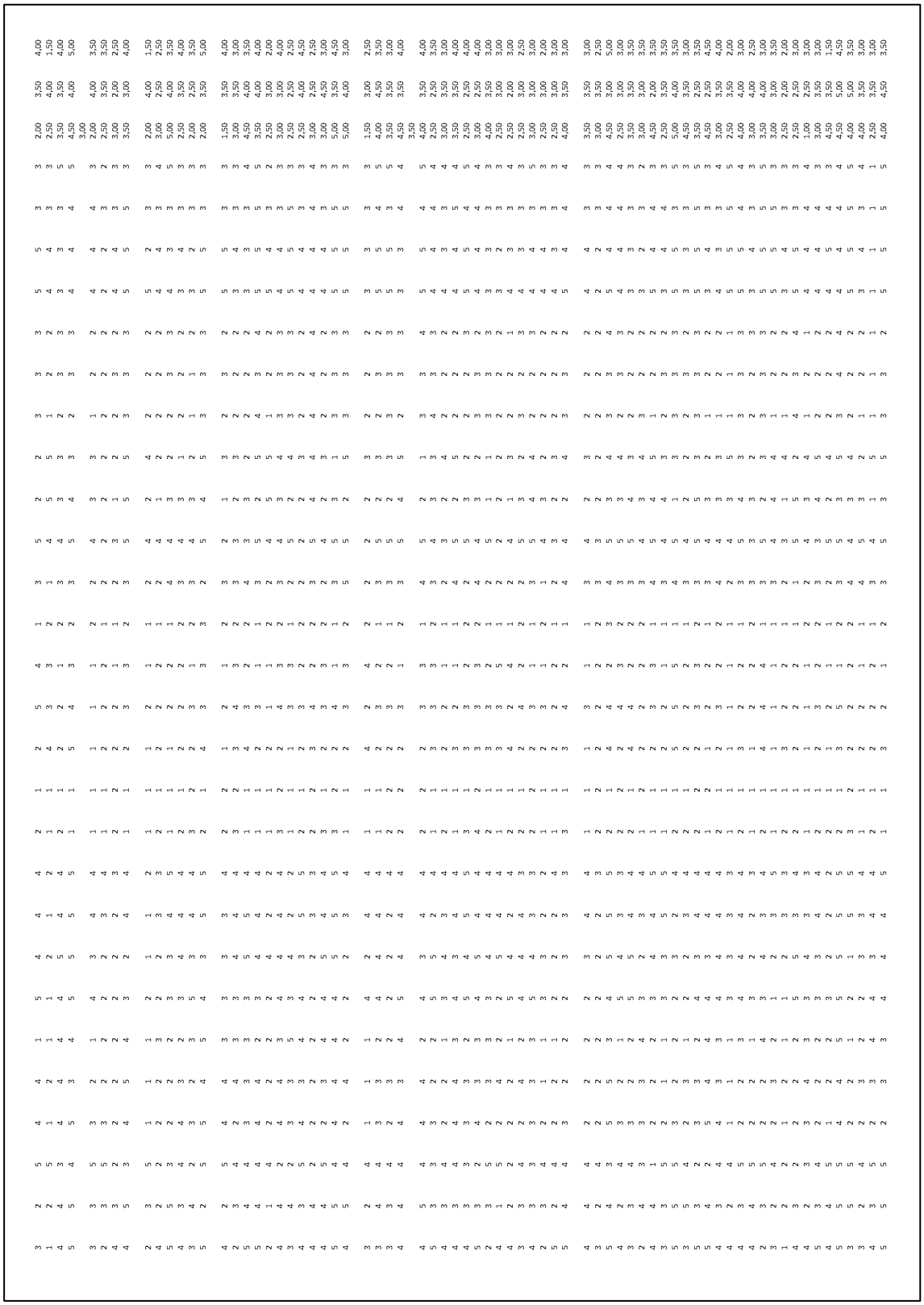

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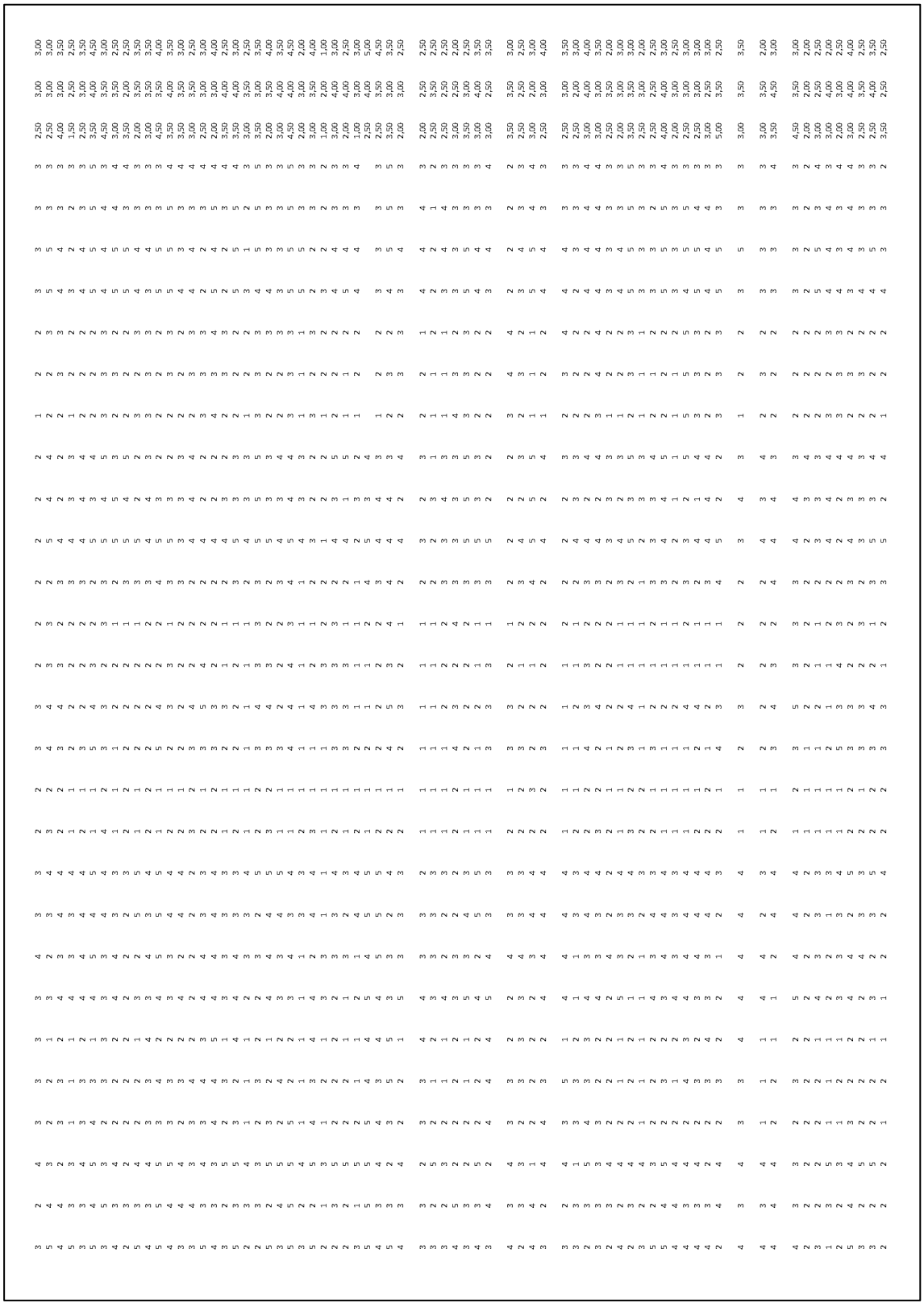

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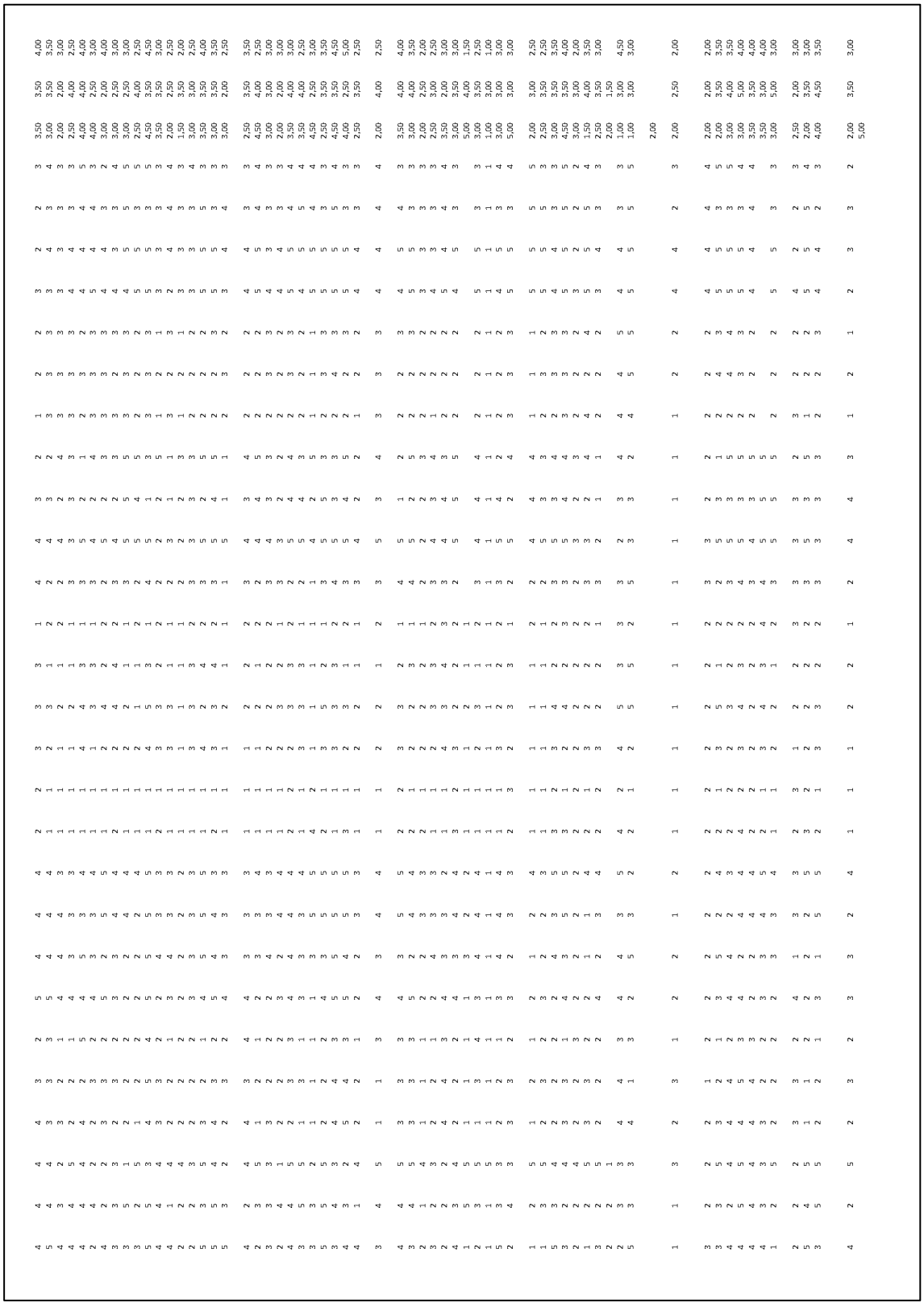

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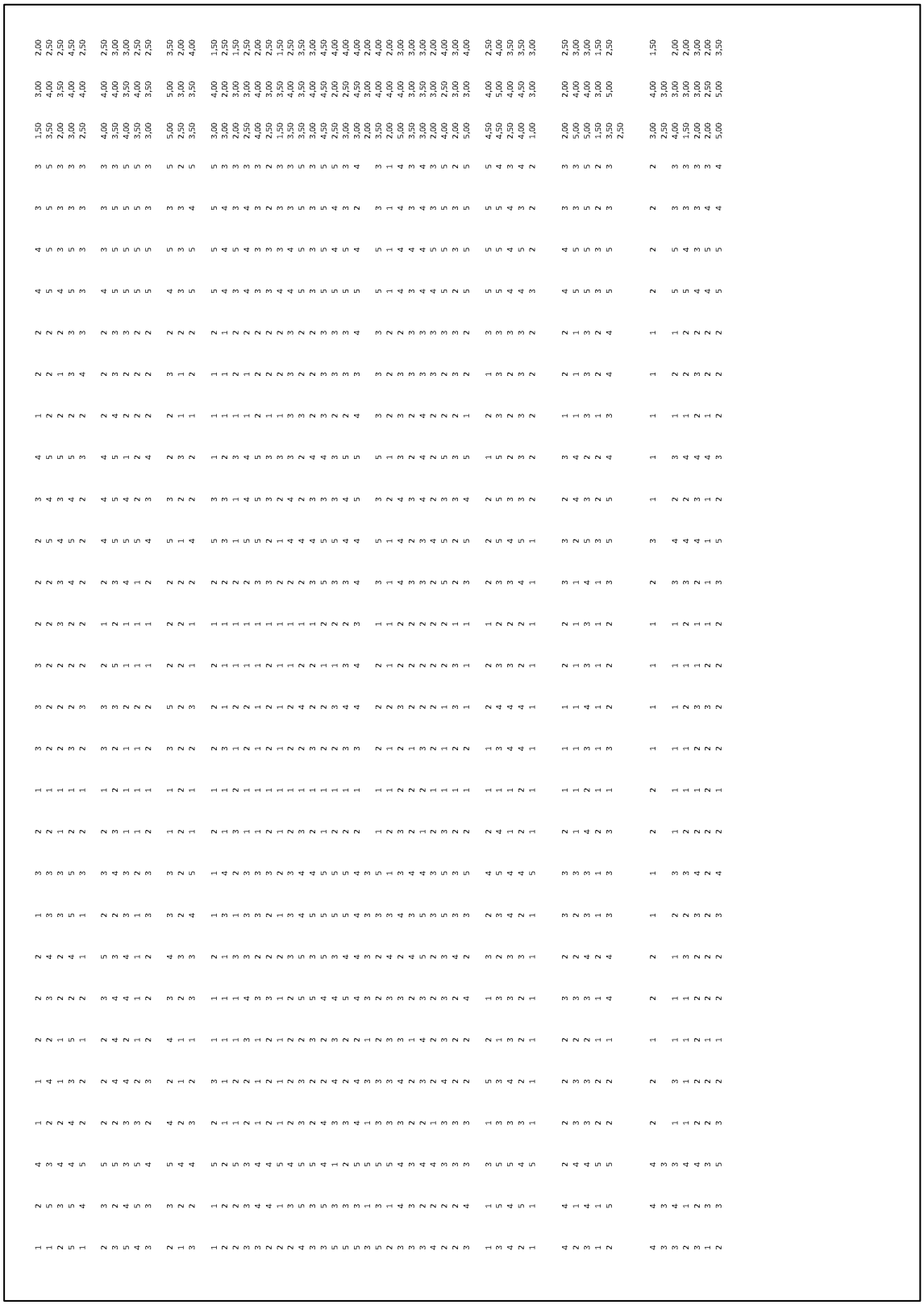

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SOC	COM	PVI	Spac_old	Tim_old	Hyg_old	Equi_old	Rules_old	Costs_old	Dist_old	Lounge_old	PrQ_old	Heal'C_old	OffBus_old	Sport_old	Outside_old	FreePV_old	JoinedC_ol	Tim	HygCon	Rules	Dist	LoungM	Stor	Health	Sport	Outside	Free	JoinedC
3,00	3,00		2,00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
4,00	2,50		1,50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
1,50	2,50		1,00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2,00	2,50		2,00	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1,00	2,00	1,00	2,00	1,00	2,00	1,00	1,00	1,00	1,00
2,00	2,50		1,50	2	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	2,00
3,00	3,50		3,50	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,00
2,00	2,00		1,50	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00
2,00	3,00		3,00	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
1,50	2,00		1,00	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00
3,00	2,50		2,00	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2,50	2,50		2,00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2,50	3,00		2,00	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2,00	3,00		2,50	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
3,00	3,50		2,50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
1,00	3,00		3,00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
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1,00	2,00	2,50		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
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2,50	2,00	2,50		1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00
3,00	2,00	2,50		2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,00	2,00
2,50	3,00	2,50		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2,50	4,00	2,50		2	1	1	1	1	1	2	1	1	1	1	1	1	2	1	2,00	2,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00
1,50	2,50	2,00		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
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3,00	4,50	3,50		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
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1,00	1,50	1,00		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
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2,00	2,00	2,50		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2,00	2,50	1,50		1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2,00	2,00	2,50		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00
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2,00	3,50	3,50	2,00	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1,00	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
3,00	3,00	3,00	1,50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
1,50	2,00	1,50	1,00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
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1,50	1,00	1,00	1,00	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00

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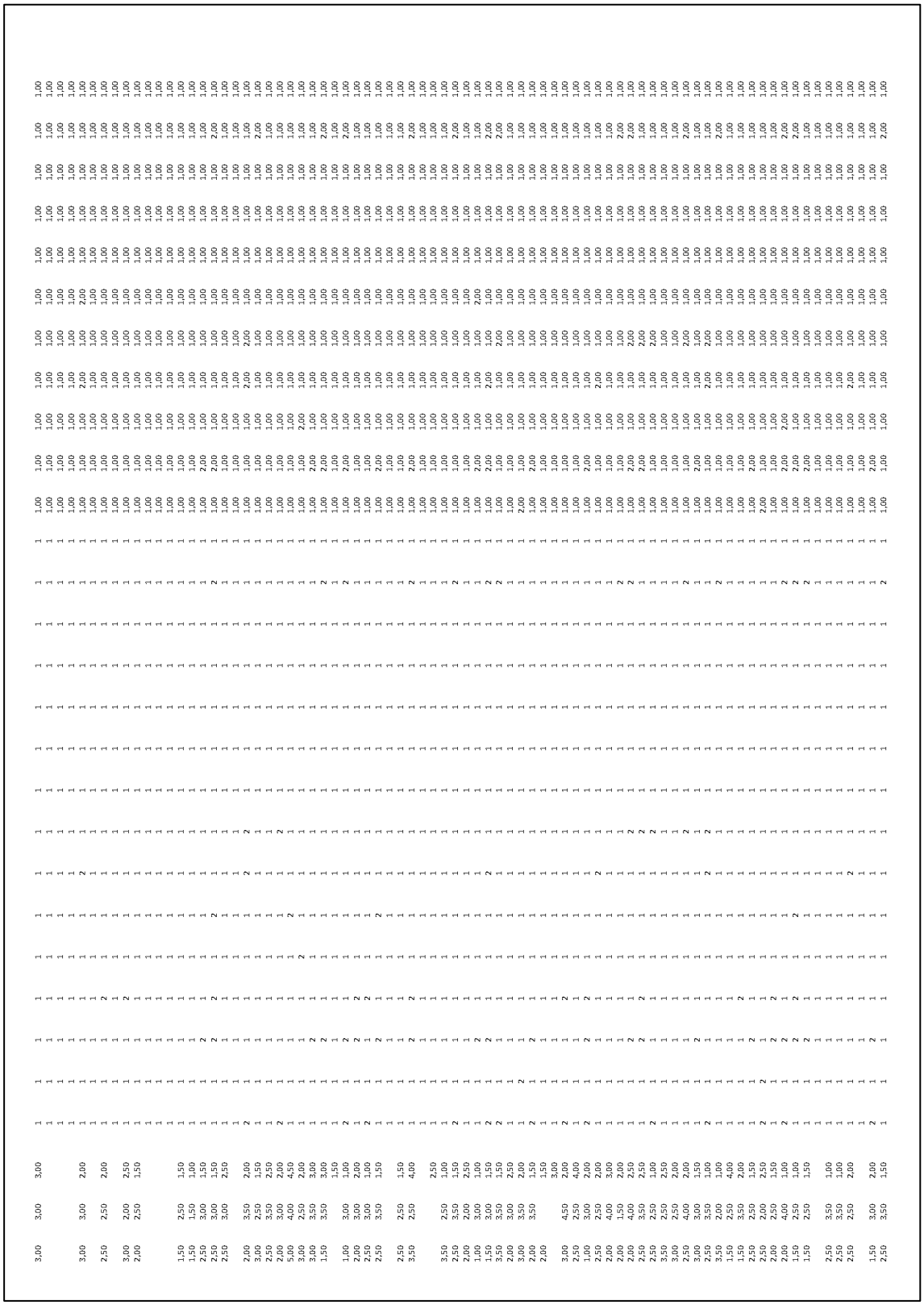

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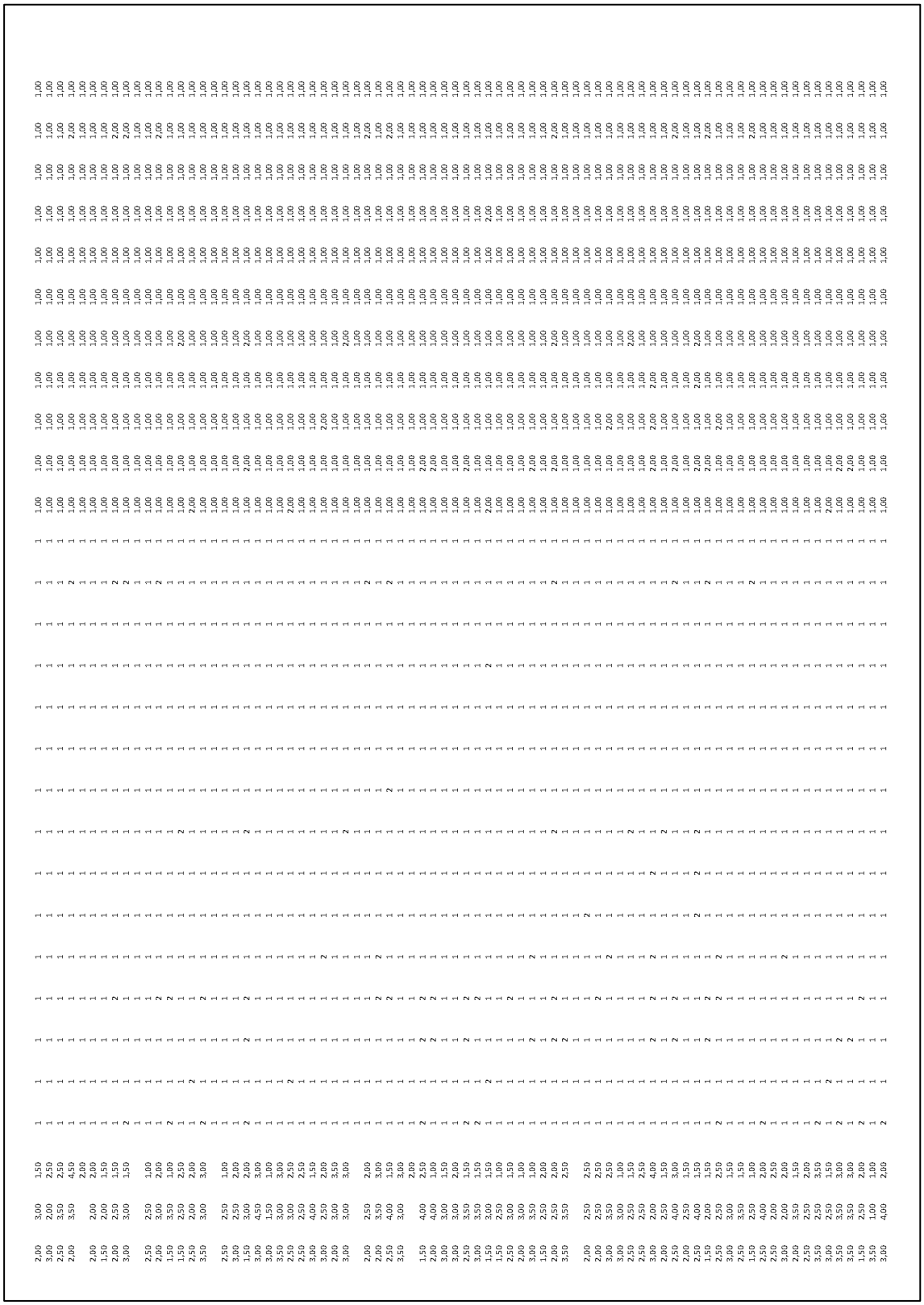

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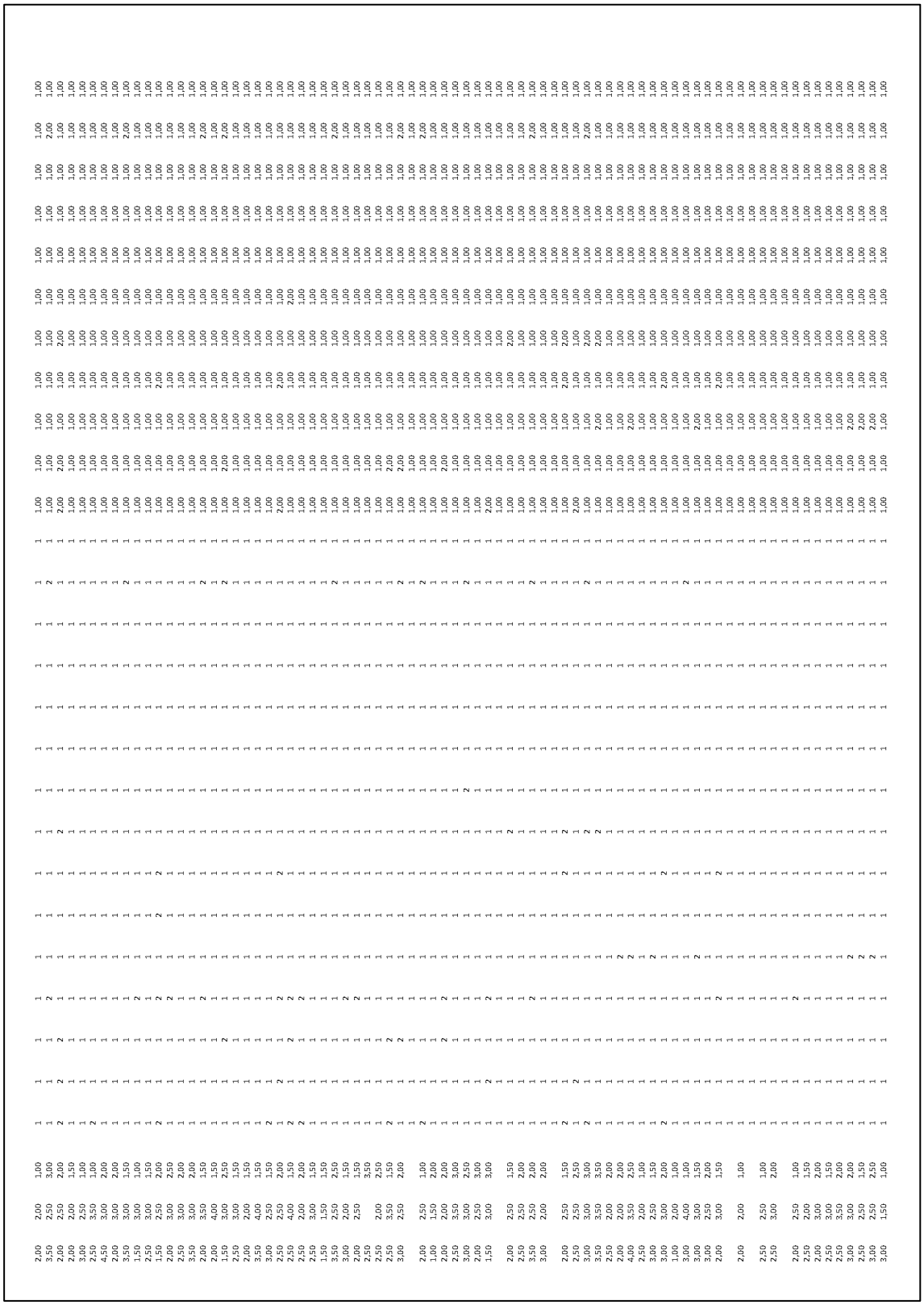

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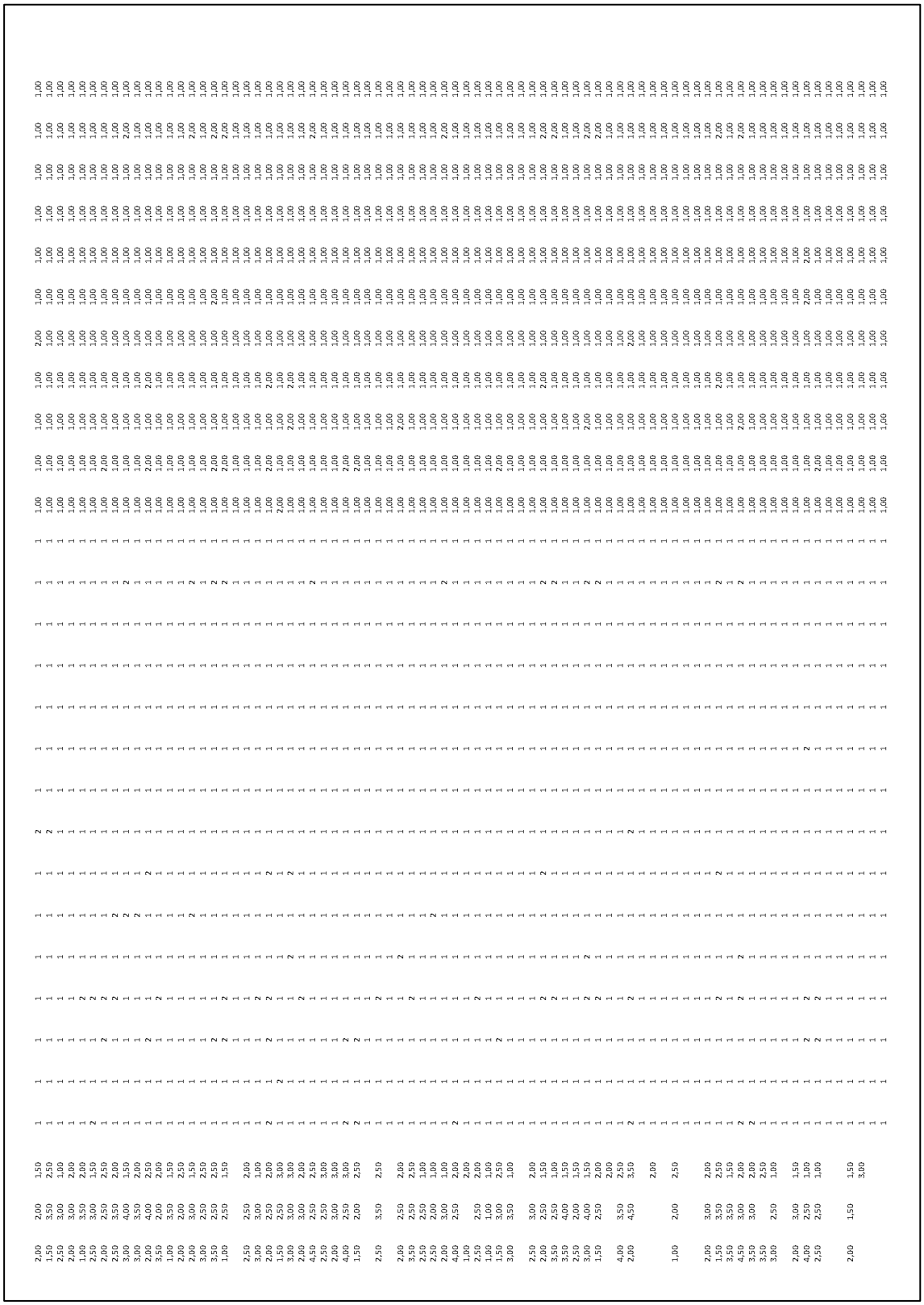


C 5

C 6

Appendix 6 - Test for Reliability

IBM SPSS Web Report - Cronbach Alpha.spv

Log

Log - Log - August 23, 2020

```
RELIABILITY
  /VARIABLES=Eat Con2 DaTi2 Tas Confi Time
  /SCALE('F&V intake') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE CORR
  /SUMMARY=TOTAL CORR.
```

Scale: F&V intake

Scale: F&V intake - Case Processing Summary - August 23, 2020

Case Processing Summary

		N	%
Cases	Valid	394	87,2
	Excluded[a]	58	12,8
	Total	452	100,0

a. Listwise deletion based on all variables in the procedure.

Scale: F&V intake

Scale: F&V intake - Reliability Statistics - August 23, 2020

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,649	,654	6

Scale: F&V intake

Scale: F&V intake - Item Statistics - August 23, 2020

Item Statistics

	Mean	Std. Deviation	N
Eat F&V at work	2,04	1,033	394
Consumption F&V	3,59	,901	394
DayTime2	2,30	1,226	394
Liking taste of F&V	1,65	,796	394
Confidence eating more F&V	2,02	,979	394
Time to eat F&V	1,87	,867	394

Scale: F&V intake

Scale: F&V intake - Inter-Item Correlation Matrix - August 23, 2020

Inter-Item Correlation Matrix

	Eat F&V at work	Consumption F&V	DayTime2	Liking taste of F&V	Confidence eating more F&V	Time to eat F&V
Eat F&V at work	1,000	,524	,343	,327	,289	,082
Consumption F&V	,524	1,000	,287	,289	,250	,139
DayTime2	,343	,287	1,000	,112	,159	,095
Liking taste of F&V	,327	,289	,112	1,000	,279	,081
Confidence eating more F&V	,289	,250	,159	,279	1,000	,336
Time to eat F&V	,082	,139	,095	,081	,336	1,000

Scale: F&V intake

Scale: F&V intake - Summary Item Statistics - August 23, 2020

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	,239	,081	,524	,443	6,442	,015	6

Scale: F&V intake

Scale: F&V intake - Item-Total Statistics - August 23, 2020

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Eat F&V at work	11,43	8,287	,524	,360	,547
Consumption F&V	9,88	8,972	,497	,312	,565
DayTime2	11,17	8,659	,319	,138	,640
Liking taste of F&V	11,81	10,116	,339	,159	,621
Confidence eating more F&V	11,45	9,098	,408	,217	,595
Time to eat F&V	11,60	10,469	,223	,120	,656

Scale: F&V intake

Scale: F&V intake - Scale Statistics - August 23, 2020

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
13,47	12,459	3,531	6

Log

Log - Log - August 23, 2020

```
RELIABILITY
  /VARIABLES=Acc FVO FVM FVL RFV
  /SCALE('Availability') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE CORR
  /SUMMARY=TOTAL CORR.
```

Scale: Availability

Scale: Availability - Case Processing Summary - August 23, 2020

Case Processing Summary

		N	%
Cases	Valid	341	75,4
	Excluded[a]	111	24,6
	Total	452	100,0

a. Listwise deletion based on all variables in the procedure.

Scale: Availability

Scale: Availability - Reliability Statistics - August 23, 2020

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items

,790	,791	5

Scale: Availability

Scale: Availability - Item Statistics - August 23, 2020

Item Statistics

	Mean	Std. Deviation	N
Acceptance canteen	2,61	1,070	341
F&V offering canteen	2,84	,929	341
F&V offered during meeting	4,17	1,148	341
F&V at different locations	4,11	1,211	341
Range of F&V	3,41	1,149	341

Scale: Availability

Scale: Availability - Inter-Item Correlation Matrix - August 23, 2020

Inter-Item Correlation Matrix

	Acceptance canteen	F&V offering canteen	F&V offered during meeting	F&V at different locations	Range of F&V
Acceptance canteen	1,000	,428	,248	,298	,336
F&V offering canteen	,428	1,000	,384	,379	,602
F&V offered during meeting	,248	,384	1,000	,526	,493
F&V at different locations	,298	,379	,526	1,000	,614
Range of F&V	,336	,602	,493	,614	1,000

Scale: Availability

Scale: Availability - Summary Item Statistics - August 23, 2020

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	,431	,248	,614	,366	2,472	,015	5

Scale: Availability

Scale: Availability - Item-Total Statistics - August 23, 2020

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Acceptance canteen	14,53	12,397	,406	,206	,799
F&V offering canteen	14,30	11,934	,593	,428	,747
F&V offered during meeting	12,97	11,093	,548	,335	,757
F&V at different locations	13,03	10,337	,616	,450	,734
Range of F&V	13,73	10,164	,699	,549	,704

Scale: Availability

Scale: Availability - Scale Statistics - August 23, 2020

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
17,14	16,604	4,075	5

Log

Log - Log - August 23, 2020

```
RELIABILITY
  /VARIABLES=Qul AcPi Equip Dis Rec Cho Cost
  /SCALE('Accessibility') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE CORR
  /SUMMARY=TOTAL CORR.
```

Scale: Accessibility

Scale: Accessibility - Case Processing Summary - August 23, 2020

Case Processing Summary

		N	%
Cases	Valid	334	73,9
	Excluded[a]	118	26,1
	Total	452	100,0

a. Listwise deletion based on all variables in the procedure.

Scale: Accessibility

Scale: Accessibility - Reliability Statistics - August 23, 2020

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,745	,742	7

Scale: Accessibility

Scale: Accessibility - Item Statistics - August 23, 2020

Item Statistics

	Mean	Std. Deviation	N
Quality of canteen F&V offering	2,77	,875	334
Access to a place preparing F&V	2,39	1,138	334
Equipment prepaing F&V	2,96	1,157	334
Increased desire	3,78	1,021	334
Recommed the place preparing F&V	3,30	1,201	334
Choosing from different F&V at work	3,12	1,087	334
Costs of F&V prevents from consumption	3,82	1,130	334

Scale: Accessibility

Scale: Accessibility - Inter-Item Correlation Matrix - August 23, 2020

Inter-Item Correlation Matrix

	Quality of canteen F&V offering	Access to a place preparing F&V	Equipment prepaing F&V	Increased desire	Recommed the place preparing F&V	Choosing from different F&V at work	Costs of F&V prevents from consumption
Quality of canteen F&V offering	1,000	,165	,215	,247	,189	,585	-,102
Access to a place preparing F&V	,165	1,000	,649	,451	,638	,290	-,050
Equipment prepaing F&V	,215	,649	1,000	,538	,782	,376	-,111
Increased desire	,247	,451	,538	1,000	,681	,373	-,045
Recommed the place preparing F&V	,189	,638	,782	,681	1,000	,352	-,079
Choosing from different F&V at work	,585	,290	,376	,373	,352	1,000	-,022
Costs of F&V prevents from consumption	-,102	-,050	-,111	-,045	-,079	-,022	1,000

Scale: Accessibility

Scale: Accessibility - Summary Item Statistics - August 23, 2020

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	,291	-,111	,782	,892	-7,055	,080	7

Scale: Accessibility

Scale: Accessibility - Item-Total Statistics - August 23, 2020

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Quality of canteen F&V offering	19,38	19,810	,322	,354	,741
Access to a place preparing F&V	19,76	16,369	,588	,466	,683
Equipment prepaing F&V	19,19	15,505	,685	,660	,658
Increased desire	18,37	16,889	,614	,487	,681
Recommed the place preparing F&V	18,85	14,957	,720	,723	,646
Choosing from different F&V at work	19,03	17,437	,492	,427	,707
Costs of F&V prevents from consumption	18,33	22,799	-,092	,026	,828

Scale: Accessibility

Scale: Accessibility - Scale Statistics - August 23, 2020

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
22,15	23,085	4,805	7

Log

Log - Log - August 23, 2020

```
RELIABILITY
  /VARIABLES=ModWp Ergo Spc Clim Noise Env Des
  /SCALE('Workplace') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE CORR
  /SUMMARY=TOTAL CORR.
```

Scale: Workplace

Scale: Workplace - Case Processing Summary - August 23, 2020

Case Processing Summary

		N	%
Cases	Valid	382	84,5
	Excluded[a]	70	15,5
	Total	452	100,0

a. Listwise deletion based on all variables in the procedure.

Scale: Workplace

Scale: Workplace - Reliability Statistics - August 23, 2020

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,821	,821	7

Scale: Workplace

Scale: Workplace - Item Statistics - August 23, 2020

Item Statistics

	Mean	Std. Deviation	N
Modern workplace provided	2,50	1,001	382
Ergonomic configuration of workplace	2,58	,987	382
Enough space at workplace	2,13	1,036	382
Fresh air and indoor climate	3,05	1,207	382
Noise at workplace	3,04	1,089	382
Environment supports F&V consumption	3,20	1,058	382
Design wrokplace encourages F&V consumption	3,55	,964	382

Scale: Workplace

Scale: Workplace - Inter-Item Correlation Matrix - August 23, 2020

Inter-Item Correlation Matrix

	Modern workplace provided	Ergonomic configuration of workplace	Enough space at workplace	Fresh air and indoor climate	Noise at workplace	Environment supports F&V consumption	Design wrokplace encourages F&V consumption
Modern workplace provided	1,000	,588	,518	,480	,397	,453	,289
Ergonomic configuration of workplace	,588	1,000	,500	,327	,276	,362	,231
Enough space at workplace	,518	,500	1,000	,358	,371	,350	,199
Fresh air and indoor climate	,480	,327	,358	1,000	,508	,523	,323
Noise at workplace	,397	,276	,371	,508	1,000	,388	,255
Environment supports F&V consumption	,453	,362	,350	,523	,388	1,000	,607
Design wrokplace encourages F&V consumption	,289	,231	,199	,323	,255	,607	1,000

Scale: Workplace

Scale: Workplace - Summary Item Statistics - August 23, 2020

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	,395	,199	,607	,408	3,050	,013	7

Scale: Workplace

Scale: Workplace - Item-Total Statistics - August 23, 2020

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Modern workplace provided	17,65	19,316	,657	,492	,781
Ergonomic configuration of workplace	17,57	20,366	,534	,404	,801
Enough space at workplace	18,02	20,031	,538	,359	,801
Fresh air and indoor climate	17,10	18,381	,605	,420	,790
Noise at workplace	17,11	19,853	,521	,317	,804
Environment supports F&V consumption	16,95	19,024	,645	,523	,782
Design wrokplace encourages F&V consumption	16,49	21,248	,441	,370	,815

Scale: Workplace

Scale: Workplace - Scale Statistics - August 23, 2020

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20,15	26,096	5,108	7

Log

Log - Log - August 23, 2020

```
RELIABILITY
  /VARIABLES=Imp Out Tog Val Sup Col Cond Emp Cow Ben
  /SCALE('Social Climate') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE CORR
  /SUMMARY=TOTAL CORR.
```

Scale: Social Climate

Scale: Social Climate - Case Processing Summary - August 23, 2020

Case Processing Summary

		N	%
Cases	Valid	378	83,6
	Excluded[a]	74	16,4
	Total	452	100,0

a. Listwise deletion based on all variables in the procedure.

Scale: Social Climate

Scale: Social Climate - Reliability Statistics - August 23, 2020

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,728	,736	10

Scale: Social Climate

Scale: Social Climate - Item Statistics - August 23, 2020

Item Statistics

	Mean	Std. Deviation	N
work is important	1,73	,766	378
strive work outcomes	1,24	,445	378
team is working together	2,23	,955	378
Valued by employer	2,54	1,025	378
Boss provides support	1,93	,908	378
Collaboration with co-workers	1,63	,651	378
Healthy food and eating conditions	2,66	,873	378
Employer cares about F&V intake	3,94	1,131	378
Co-workers care about health	2,86	1,041	378
Talking to co-workers about F&V benefits	3,21	1,216	378

Scale: Social Climate

Scale: Social Climate - Inter-Item Correlation Matrix - August 23, 2020

Inter-Item Correlation Matrix

	work is important	strive work outcomes	team is working together	Valued by employer	Boss provides support	Collaboration with co-workers	Healthy food and eating conditions	Employer cares about F&V intake	Co-workers care about health	Talking to co-worke about F&V benefit
work is important	1,000	,433	,185	,301	,174	,204	,153	,142	,091	,1
strive work outcomes	,433	1,000	,063	,163	,068	,155	,095	,051	,039	,0
team is working together	,185	,063	1,000	,562	,478	,355	,278	,250	,084	,0
Valued by employer	,301	,163	,562	1,000	,549	,319	,308	,295	,116	,0
Boss provides support	,174	,068	,478	,549	1,000	,297	,257	,104	,090	,0
Collaboration with co-workers	,204	,155	,355	,319	,297	1,000	,255	,127	,358	,2
Healthy food and eating conditions	,153	,095	,278	,308	,257	,255	1,000	,443	,226	,1
Employer cares about F&V intake	,142	,051	,250	,295	,104	,127	,443	1,000	,344	,2
Co-workers care about health	,091	,039	,084	,116	,090	,358	,226	,344	1,000	,2
Talking to co-workers about F&V benefits	,102	,098	,072	,065	,095	,246	,131	,261	,341	1,0

Scale: Social Climate

Scale: Social Climate - Summary Item Statistics - August 23, 2020

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	,218	,039	,562	,522	14,289	,019	10

Scale: Social Climate

Scale: Social Climate - Item-Total Statistics - August 23, 2020

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
work is important	22,24	22,072	,316	,251	,717
strive work outcomes	22,73	23,821	,209	,201	,728
team is working together	21,74	19,988	,472	,400	,692
Valued by employer	21,42	19,067	,538	,479	,680
Boss provides support	22,04	20,601	,425	,371	,701
Collaboration with co-workers	22,33	21,645	,472	,302	,700
Healthy food and eating conditions	21,31	20,613	,448	,259	,697
Employer cares about F&V intake	20,03	19,325	,435	,339	,699
Co-workers care about health	21,11	20,513	,353	,269	,713
Talking to co-workers about F&V benefits	20,76	20,370	,281	,170	,732

Scale: Social Climate

Scale: Social Climate - Scale Statistics - August 23, 2020

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
23,97	24,927	4,993	10

Log

Log - Log - August 23, 2020

```
RELIABILITY
  /VARIABLES=GenIn InQual Eff Reg Exp FVC Opp
  /SCALE('Communication') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE CORR
  /SUMMARY=TOTAL CORR.
```

Scale: Communication

Scale: Communication - Case Processing Summary - August 23, 2020

Case Processing Summary

		N	%
Cases	Valid	374	82,7
	Excluded[a]	78	17,3
	Total	452	100,0

a. Listwise deletion based on all variables in the procedure.

Scale: Communication

Scale: Communication - Reliability Statistics - August 23, 2020

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,826	,827	7

Scale: Communication

Scale: Communication - Item Statistics - August 23, 2020

Item Statistics

	Mean	Std. Deviation	N
General information are shared	2,07	,814	374
Quality of general information	2,38	,729	374
Emplyer efforts to inform	2,41	,783	374
Regular information about F&V	4,02	,966	374
Benefits of F&V are explained	4,02	1,001	374
Quality of F&V communication	3,51	,925	374
Efforts to inform about F&V intake opportunities	3,52	,899	374

Scale: Communication

Scale: Communication - Inter-Item Correlation Matrix - August 23, 2020

Inter-Item Correlation Matrix

	General information are shared	Quality of general information	Emplyer efforts to inform	Regular information about F&V	Benefits of F&V are explained	Quality of F&V communication	Efforts to inform about F&V intake opportunities
General information are shared	1,000	,661	,735	,223	,212	,257	,231
Quality of general information	,661	1,000	,752	,217	,242	,222	,232
Emplyer efforts to inform	,735	,752	1,000	,247	,232	,220	,260
Regular information about F&V	,223	,217	,247	1,000	,768	,570	,509
Benefits of F&V are explained	,212	,242	,232	,768	1,000	,642	,482
Quality of F&V communication	,257	,222	,220	,570	,642	1,000	,593
Efforts to inform about F&V intake opportunities	,231	,232	,260	,509	,482	,593	1,000

Scale: Communication

Scale: Communication - Summary Item Statistics - August 23, 2020

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	,405	,212	,768	,555	3,621	,045	7

Scale: Communication

Scale: Communication - Item-Total Statistics - August 23, 2020

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
General information are shared	19,87	14,717	,503	,576	,813
Quality of general information	19,55	15,085	,513	,596	,812
Emplyer efforts to inform	19,52	14,695	,536	,672	,809
Regular information about F&V	17,91	13,174	,630	,619	,792
Benefits of F&V are explained	17,91	12,917	,640	,655	,791
Quality of F&V communication	18,42	13,467	,618	,527	,795
Efforts to inform about F&V intake opportunities	18,41	13,970	,557	,406	,805

Scale: Communication

Scale: Communication - Scale Statistics - August 23, 2020

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
21,93	18,524	4,304	7

Log

Log - Log - August 23, 2020

Your license renewal date has passed. This product will stop working if a new license is not installed soon.

Appendix 7 - Test for Linearity

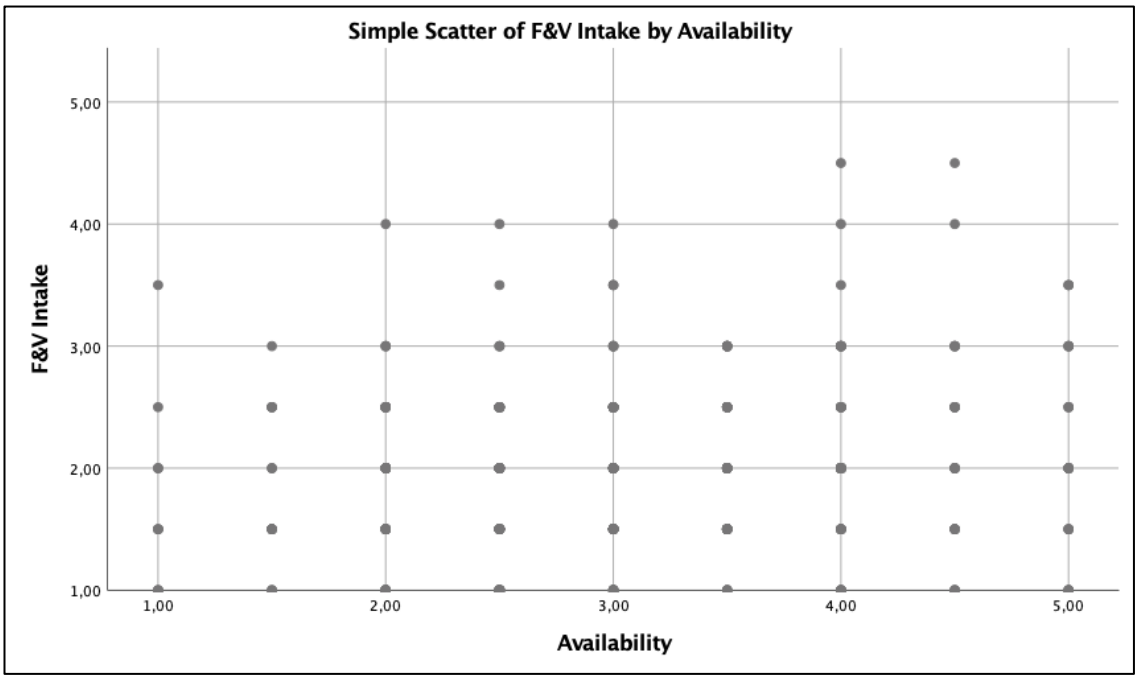


Figure 3 - Scatterplot Availability

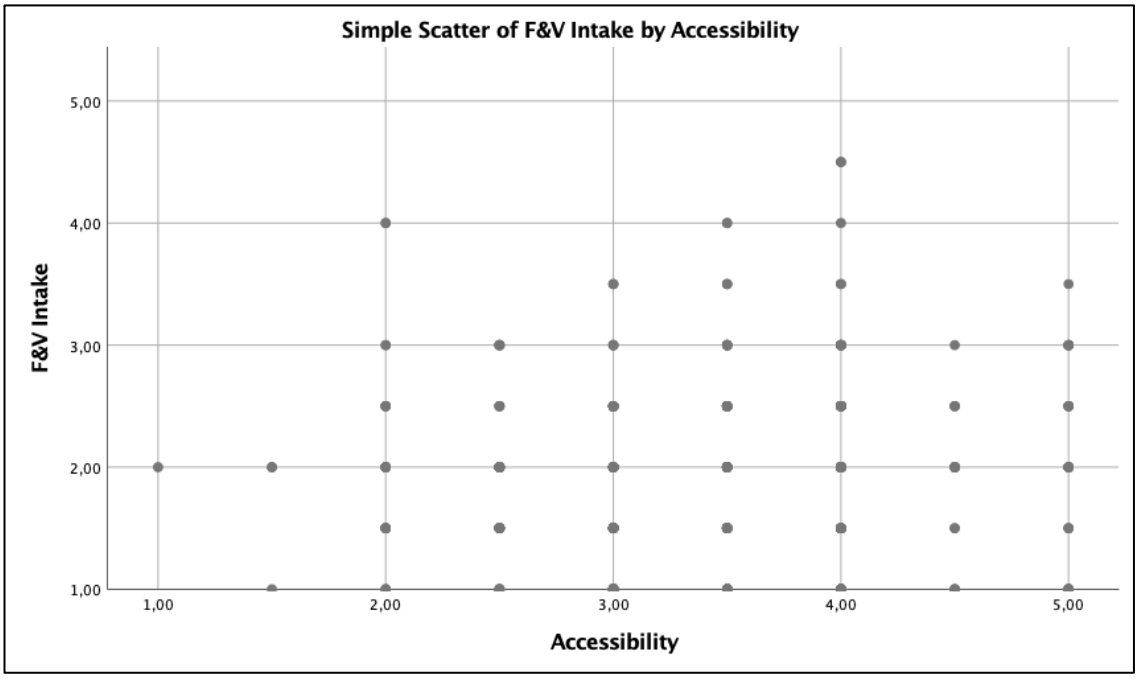


Figure 4 - Scatterplot Accessibility

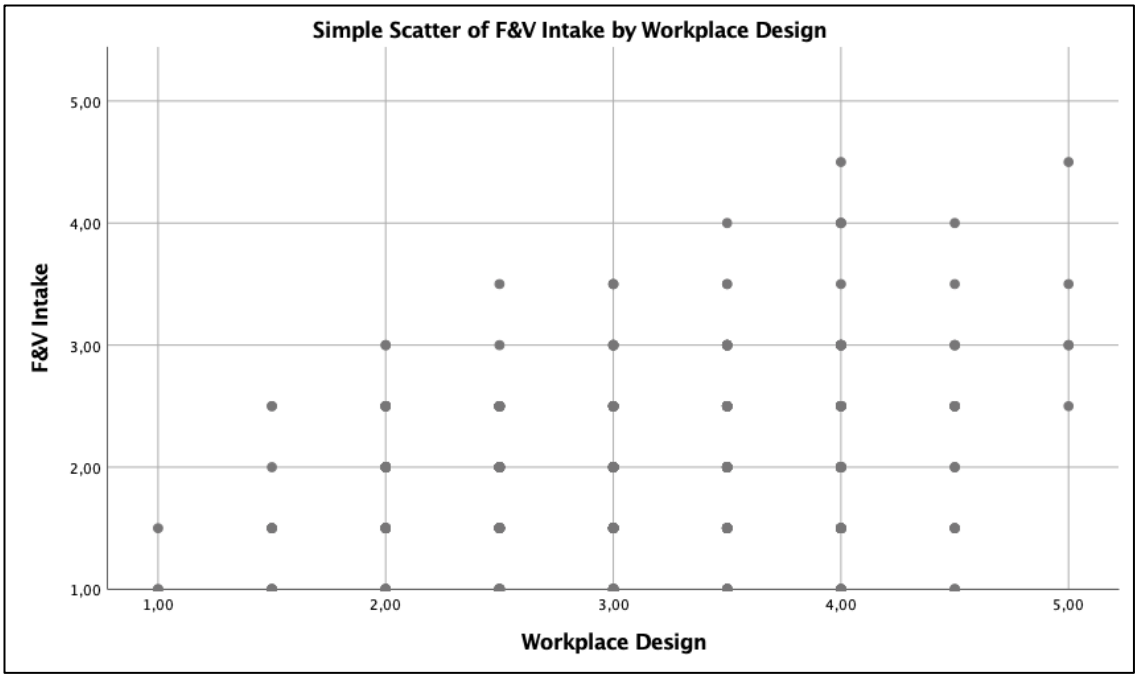


Figure 5 - Scatterplot Workplace Design

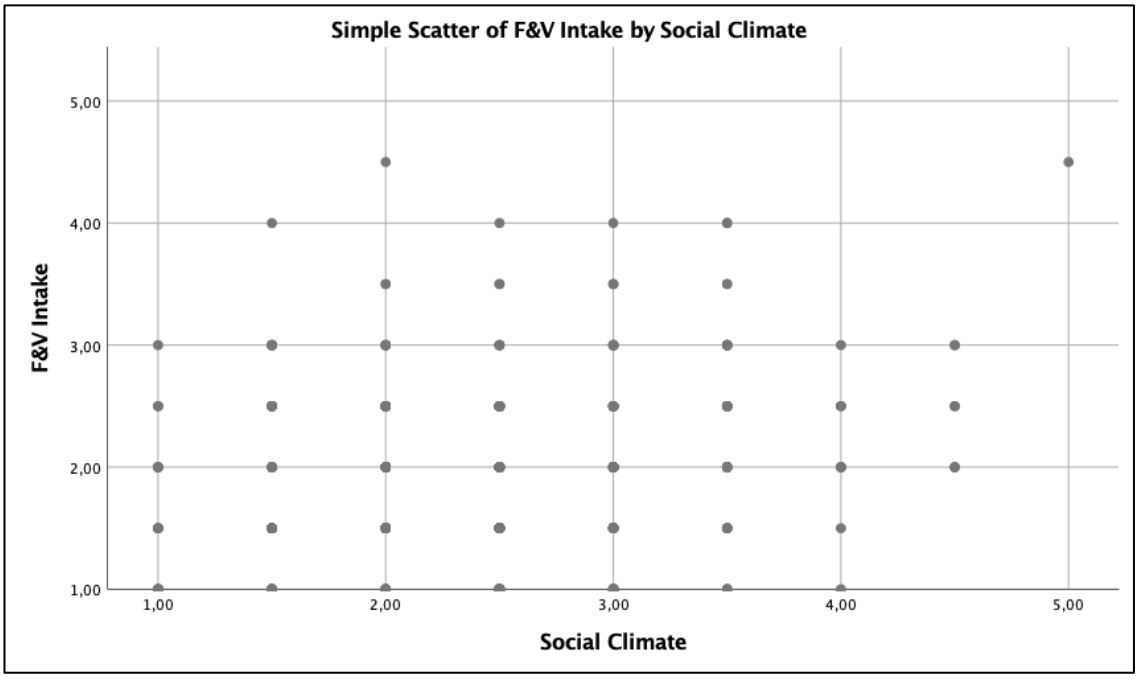


Figure 6 - Scatterplot Social Climate

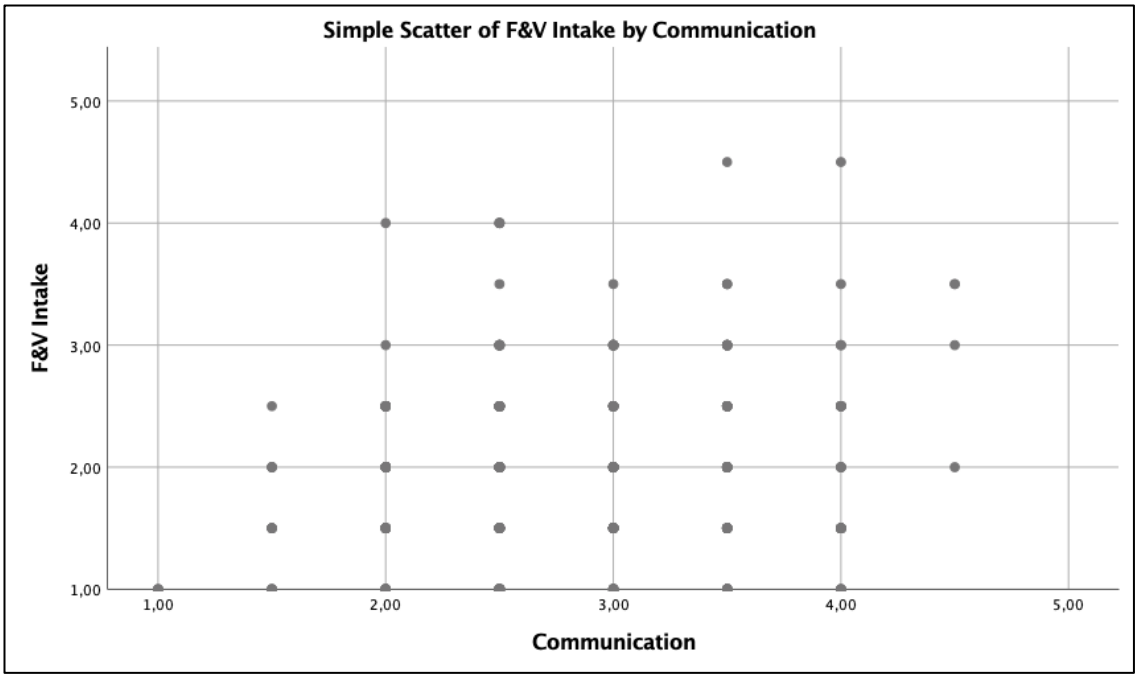


Figure 7 - Scatterplot Communication

Appendix 8 - Test for Normality

IBM SPSS Web Report - normality DV IV.spv

Log
Log - Log - August 23, 2020

```
EXAMINE VARIABLES=AVA ACE WOP SOC COM FVI
  /ID=id
  /PLOT BOXPLOT HISTOGRAM NPPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING PAIRWISE
  /NOTOTAL.
```

Explore
Explore - Active Dataset - August 23, 2020

[DataSet1] /Users/christianklein/OneDrive - University of Worcester/Christian's Research/Christia

Explore
Explore - Case Processing Summary - August 23, 2020

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Availability	393	86,9%	59	13,1%	452	100,0%
Accessibility	384	85,0%	68	15,0%	452	100,0%
Workplace Design	382	84,5%	70	15,5%	452	100,0%
Social Climate	379	83,8%	73	16,2%	452	100,0%
Communication	374	82,7%	78	17,3%	452	100,0%
F&V Intake	395	87,4%	57	12,6%	452	100,0%

Explore
Explore - Descriptives - August 23, 2020

Descriptives

			Statistic	Std. Error
Availability	Mean		3,0700	,04925
	95% Confidence Interval for Mean	Lower Bound	2,9731	
		Upper Bound	3,1668	
	5% Trimmed Mean		3,0541	
	Median		3,0000	
	Variance		,954	
	Std. Deviation		,97654	
	Minimum		1,00	
	Maximum		5,00	
	Range		4,00	
	Interquartile Range		1,25	
	Skewness		,160	,123
	Kurtosis		-,558	,246
Accessibility	Mean		3,4063	,03956
	95% Confidence Interval for Mean	Lower Bound	3,3285	
		Upper Bound	3,4840	
	5% Trimmed Mean		3,4031	
	Median		3,5000	
	Variance		,601	
	Std. Deviation		,77514	
	Minimum		1,00	
	Maximum		5,00	
	Range		4,00	
	Interquartile Range		1,00	
	Skewness		,050	,125
	Kurtosis		-,054	,248
Workplace Design	Mean		3,0812	,04035
	95% Confidence Interval for	Lower Bound	3,0018	

	Mean	Upper Bound	3,1605	
	5% Trimmed Mean		3,0828	
	Median		3,0000	
	Variance		,622	
	Std. Deviation		,78867	
	Minimum		1,00	
	Maximum		5,00	
	Range		4,00	
	Interquartile Range		1,00	
	Skewness		-,008	,125
	Kurtosis		-,311	,249
Social Climate	Mean		2,4657	,03870
	95% Confidence Interval for Mean	Lower Bound	2,3896	
		Upper Bound	2,5418	
	5% Trimmed Mean		2,4531	
	Median		2,5000	
	Variance		,568	
	Std. Deviation		,75339	
	Minimum		1,00	
	Maximum		5,00	
	Range		4,00	
	Interquartile Range		1,00	
	Skewness		,252	,125
	Kurtosis		,017	,250
Communication	Mean		2,7928	,03477
	95% Confidence Interval for Mean	Lower Bound	2,7244	
		Upper Bound	2,8612	
	5% Trimmed Mean		2,7920	
	Median		2,5000	
	Variance		,452	
	Std. Deviation		,67250	
	Minimum		1,00	
	Maximum		4,50	
	Range		3,50	
	Interquartile Range		1,00	
	Skewness		,129	,126
	Kurtosis		-,309	,252
F&V Intake	Mean		1,9570	,03560
	95% Confidence Interval for Mean	Lower Bound	1,8870	
		Upper Bound	2,0270	
	5% Trimmed Mean		1,9142	
	Median		2,0000	
	Variance		,501	
	Std. Deviation		,70759	
	Minimum		1,00	
	Maximum		4,50	
	Range		3,50	
	Interquartile Range		1,00	
	Skewness		,715	,123
	Kurtosis		,507	,245

Explore

Explore - Tests of Normality - August 23, 2020

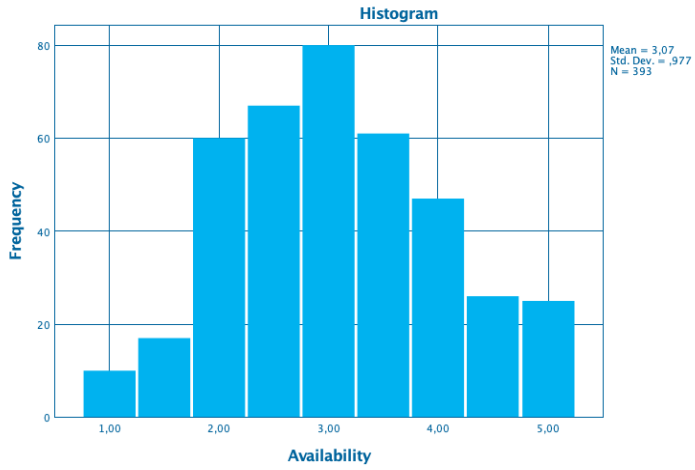
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Availability	,124	393	,000	,952	393	,000
Accessibility	,132	384	,000	,953	384	,000
Workplace Design	,146	382	,000	,963	382	,000
Social Climate	,134	379	,000	,954	379	,000
Communication	,176	374	,000	,948	374	,000
F&V Intake	,169	395	,000	,916	395	,000

a. Lilliefors Significance Correction

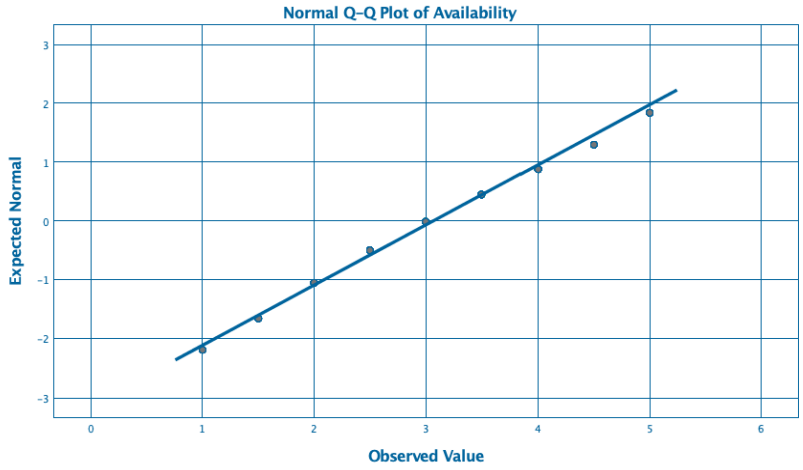
Availability

Availability - Histogram - August 23, 2020



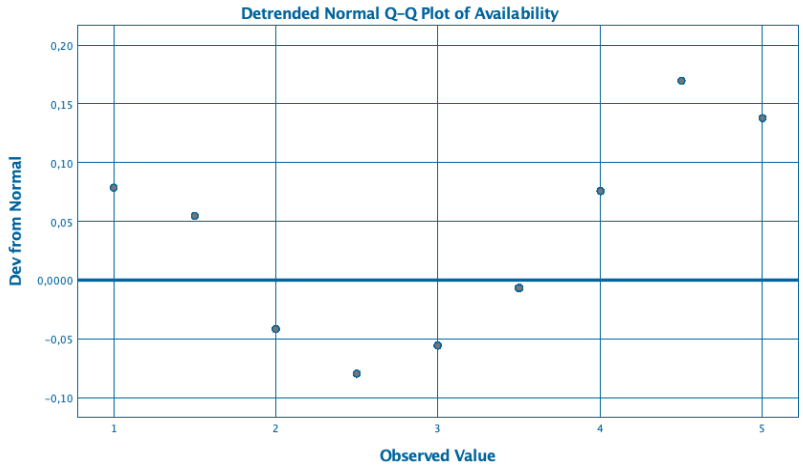
Availability

Availability - Normal Q-Q Plot - August 23, 2020



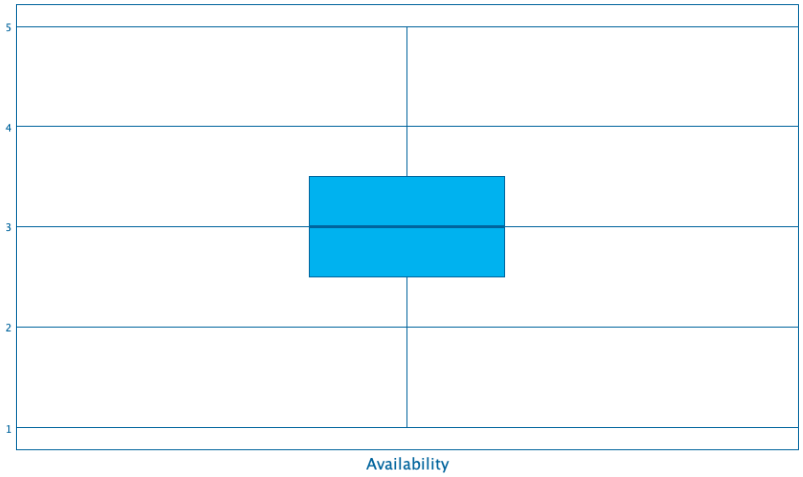
Availability

Availability - Detrended Normal Q-Q Plot - August 23, 2020



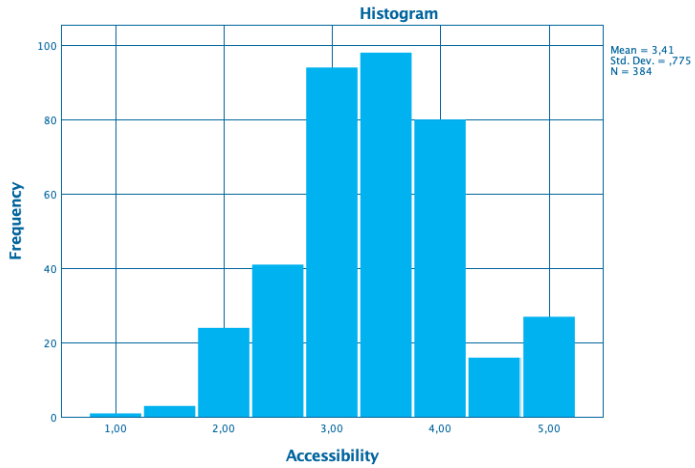
Availability

Availability - Boxplot - August 23, 2020



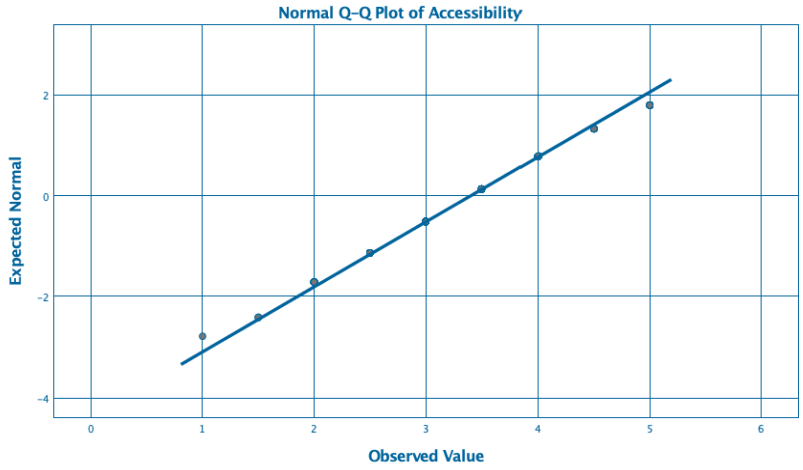
Accessibility

Accessibility - Histogram - August 23, 2020



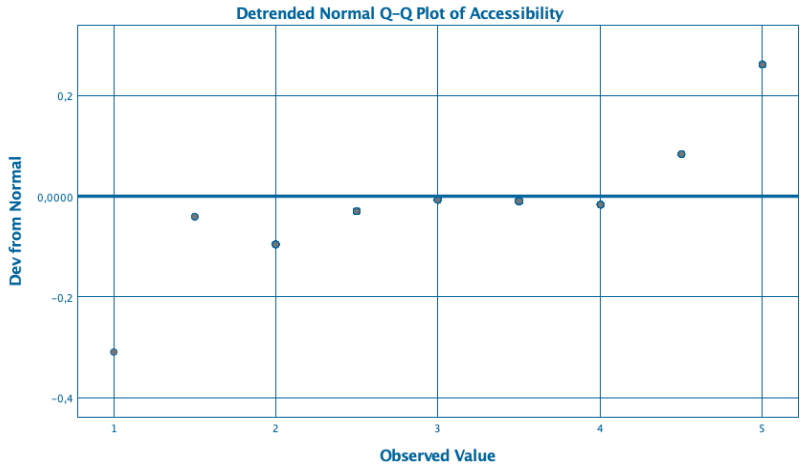
Accessibility

Accessibility - Normal Q-Q Plot - August 23, 2020



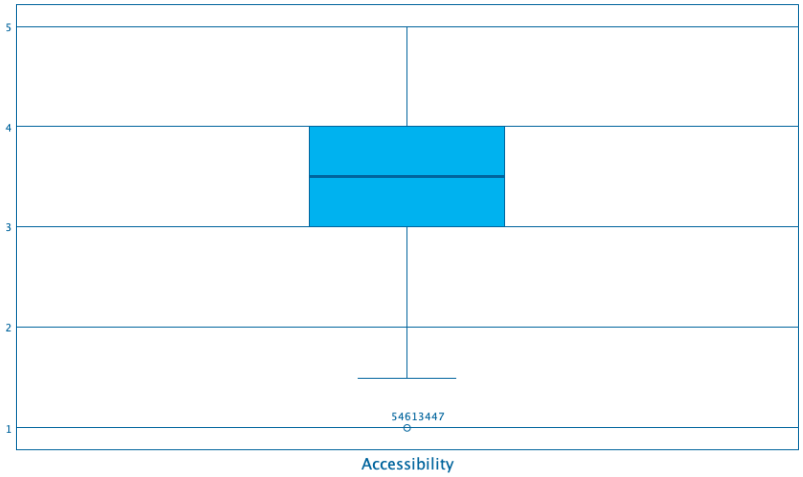
Accessibility

Accessibility - Detrended Normal Q-Q Plot - August 23, 2020



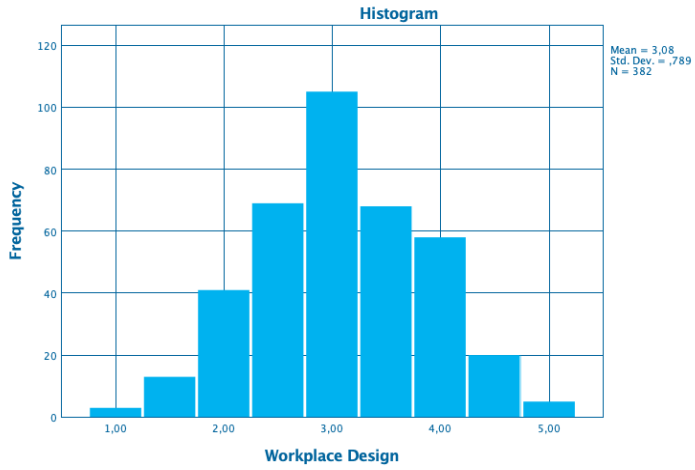
Accessibility

Accessibility - Boxplot - August 23, 2020



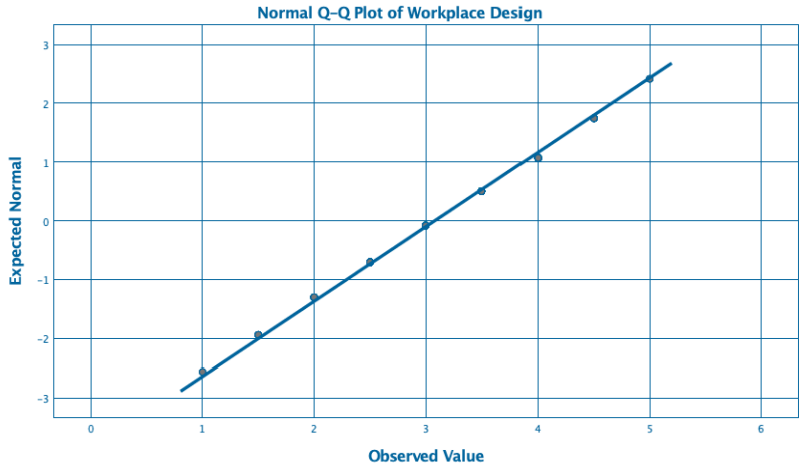
Workplace Design

Workplace Design - Histogram - August 23, 2020



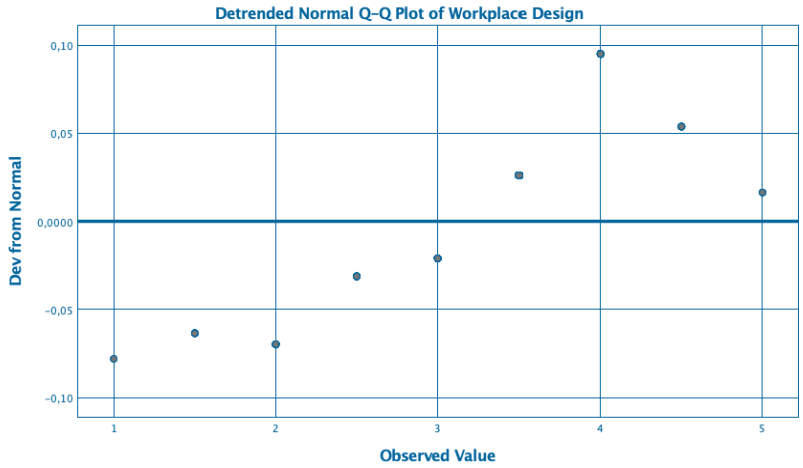
Workplace Design

Workplace Design - Normal Q-Q Plot - August 23, 2020



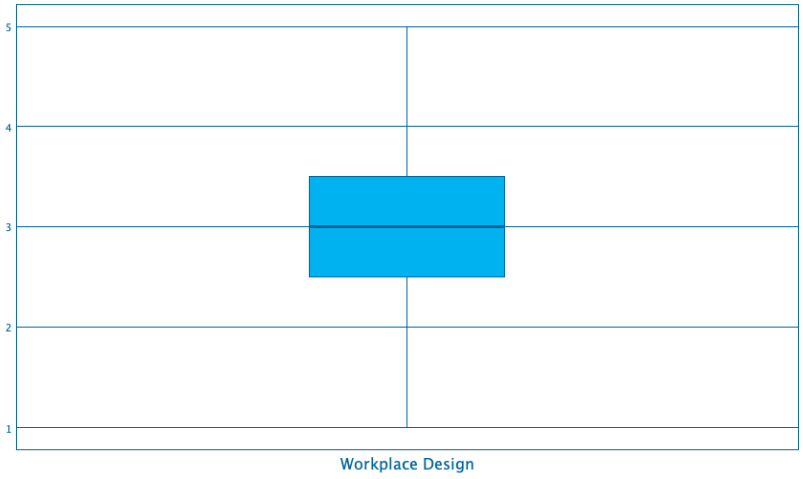
Workplace Design

Workplace Design - Detrended Normal Q-Q Plot - August 23, 2020



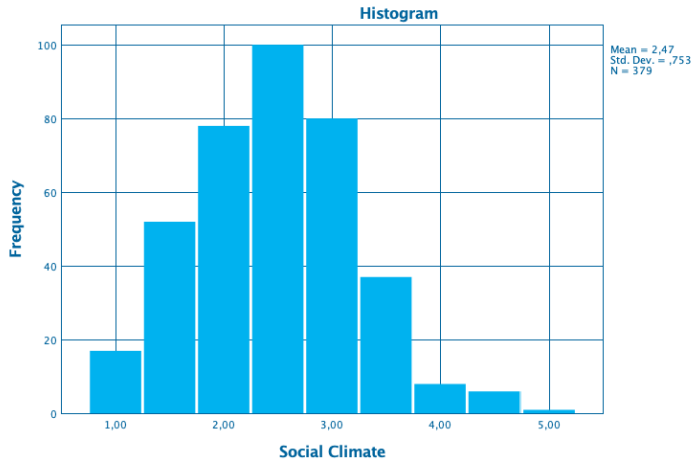
Workplace Design

Workplace Design - Boxplot - August 23, 2020



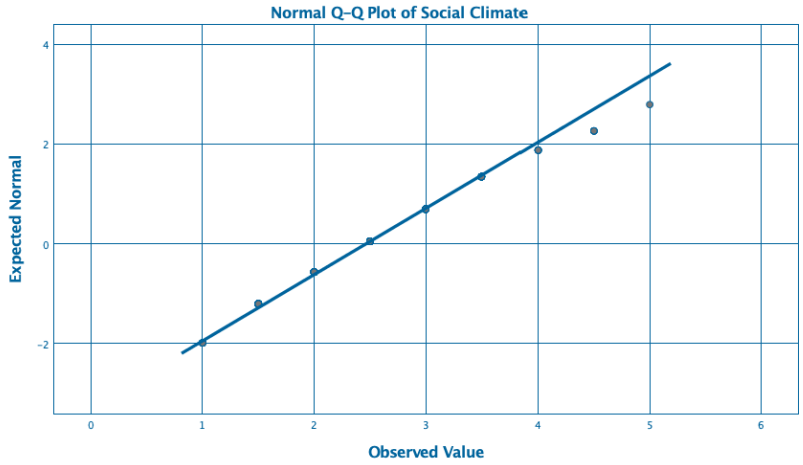
Social Climate

Social Climate - Histogram - August 23, 2020



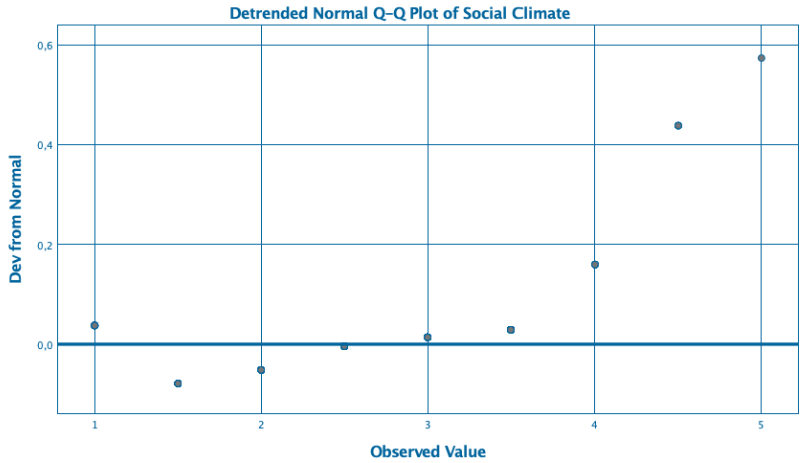
Social Climate

Social Climate - Normal Q-Q Plot - August 23, 2020



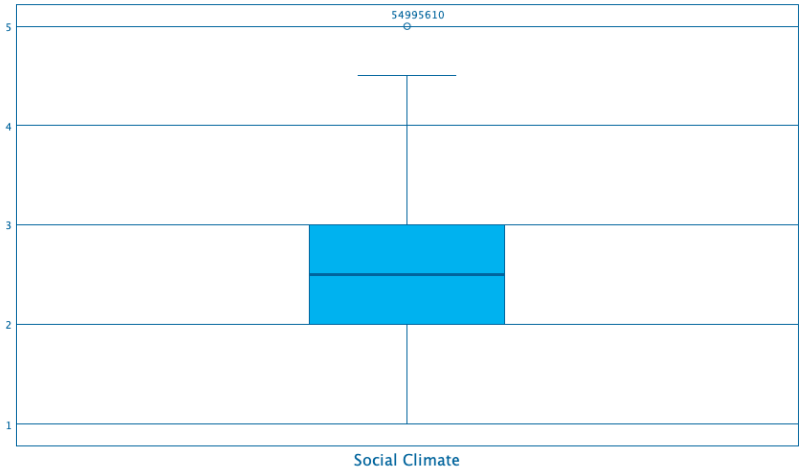
Social Climate

Social Climate - Detrended Normal Q-Q Plot - August 23, 2020



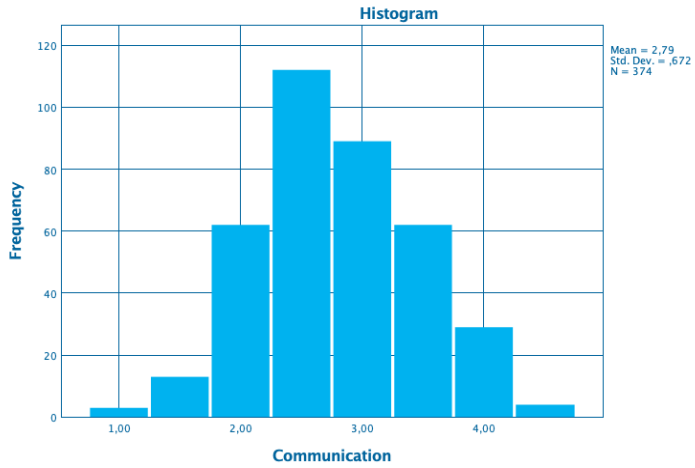
Social Climate

Social Climate - Boxplot - August 23, 2020



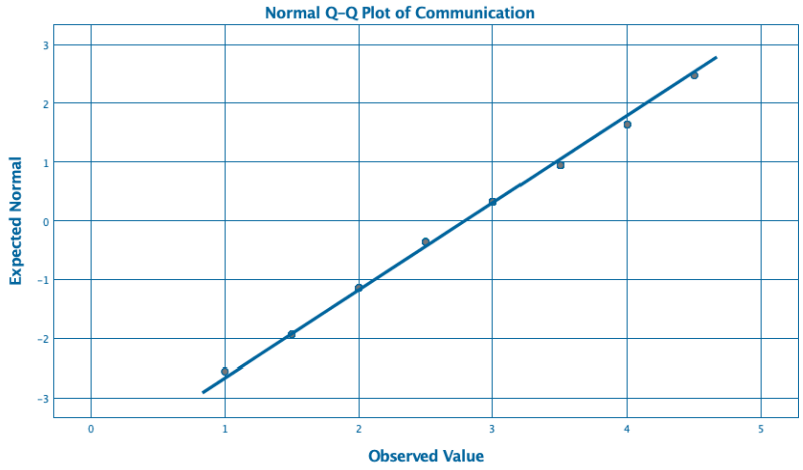
Communication

Communication - Histogram - August 23, 2020



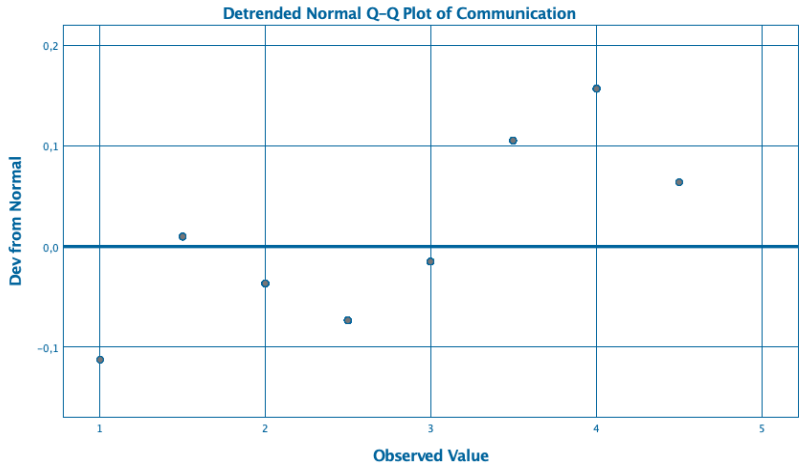
Communication

Communication - Normal Q-Q Plot - August 23, 2020



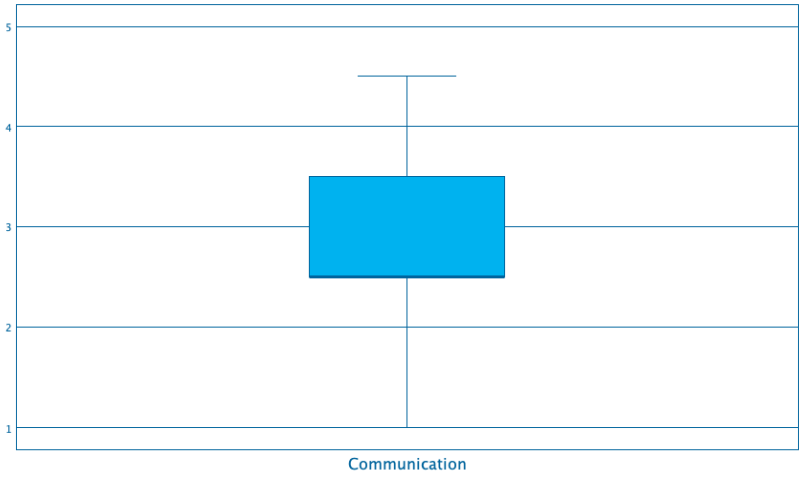
Communication

Communication - Detrended Normal Q-Q Plot - August 23, 2020



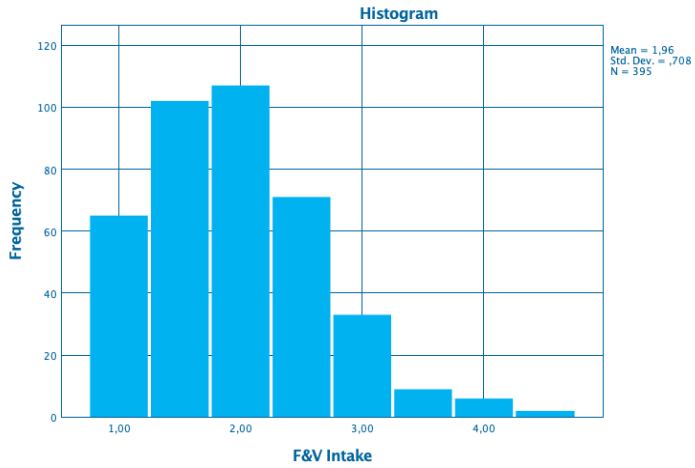
Communication

Communication - Boxplot - August 23, 2020



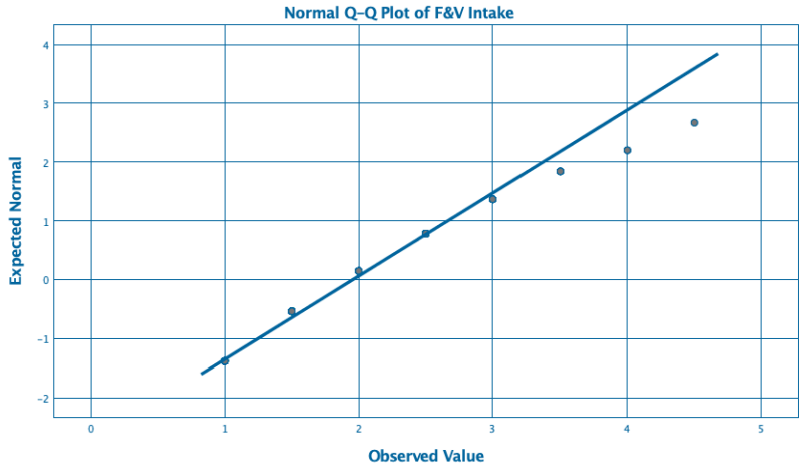
F&V Intake

F&V Intake - Histogram - August 23, 2020



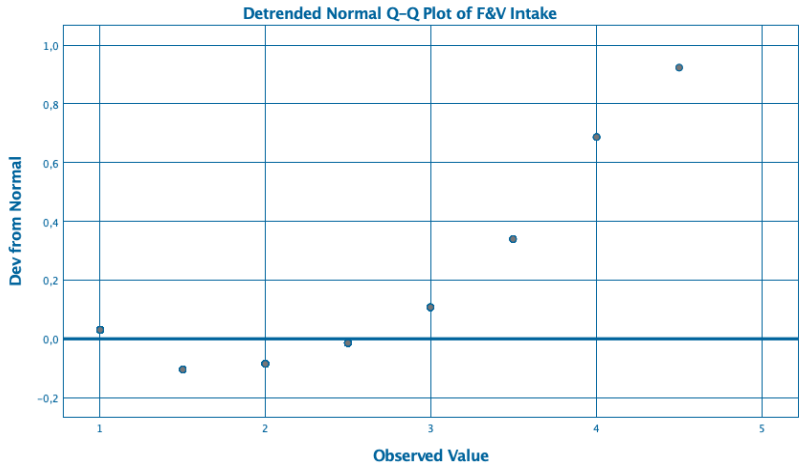
F&V Intake

F&V Intake - Normal Q-Q Plot - August 23, 2020



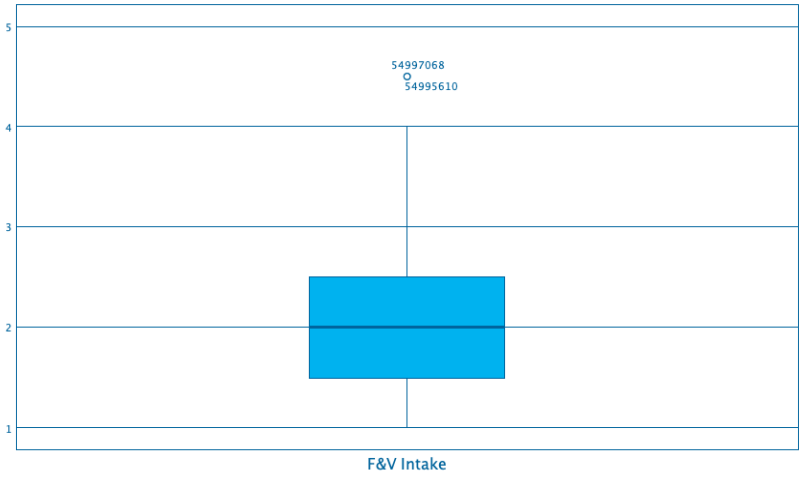
F&V Intake

F&V Intake - Detrended Normal Q-Q Plot - August 23, 2020



F&V Intake

F&V Intake - Boxplot - August 23, 2020



Appendix 9 - Correlation Analysis

IBM SPSS Web Report - correlation v4.spv

Log

Log - Log - August 17, 2019

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CORRELATIONS
  /VARIABLES=AVA ACE WOP SOC COM FVI
  /PRINT=TWOTAIL NOSIG
  /STATISTICS DESCRIPTIVES XPROD
  /MISSING=PAIRWISE.
```

Correlations

Correlations - Descriptive Statistics - August 17, 2019

Descriptive Statistics

	Mean	Std. Deviation	N
Availability	3,0700	,97654	393
Accessibility	3,4063	,77514	384
Workplace	3,0812	,78867	382
Social Climate	2,4657	,75339	379
Communication	2,7928	,67250	374
F&V Intake	1,9570	,70759	395

Correlations

Correlations - Correlations - August 17, 2019

Correlations

		Availability	Accessibility	Workplace	Social Climate	Communication	F&V Intake
Availability	Pearson Correlation	1	,278**	,322**	,129*	,438**	,162**
	Sig. (2-tailed)		,000	,000	,012	,000	,001
	Sum of Squares and Cross-products	373,826	80,891	94,809	36,176	107,784	43,365
	Covariance	,954	,211	,249	,096	,289	,111
	N	393	384	382	379	374	393
Accessibility	Pearson Correlation	,278**	1	,133**	,038	,105*	,047
	Sig. (2-tailed)	,000		,009	,460	,042	,363
	Sum of Squares and Cross-products	80,891	230,125	30,719	8,385	20,308	9,719
	Covariance	,211	,601	,081	,022	,054	,025
	N	384	384	382	379	374	384
Workplace	Pearson Correlation	,322**	,133**	1	,192**	,410**	,278**
	Sig. (2-tailed)	,000	,009		,000	,000	,000
	Sum of Squares and Cross-products	94,809	30,719	236,984	43,132	80,131	58,832
	Covariance	,249	,081	,622	,114	,215	,154
	N	382	382	382	379	374	382
Social Climate	Pearson Correlation	,129*	,038	,192**	1	,171**	,222**
	Sig. (2-tailed)	,012	,460	,000		,001	,000
	Sum of Squares and Cross-products	36,176	8,385	43,132	214,554	32,074	44,564
	Covariance	,096	,022	,114	,568	,086	,118
	N	379	379	379	379	374	379
Communication	Pearson Correlation	,438**	,105*	,410**	,171**	1	,157**
	Sig. (2-tailed)	,000	,042	,000	,001		,002
	Sum of Squares and Cross-products	107,784	20,308	80,131	32,074	168,691	27,752
	Covariance	,289	,054	,215	,086	,452	,074
	N	374	374	374	374	374	374
F&V Intake	Pearson Correlation	,162**	,047	,278**	,222**	,157**	1
	Sig. (2-tailed)	,001	,363	,000	,000	,002	
	Sum of Squares and Cross-products	43,365	9,719	58,832	44,564	27,752	197,268
	Covariance	,111	,025	,154	,118	,074	,501
	N	393	384	382	379	374	395

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Log

Log - Log - August 17, 2019

```
NONPAR CORR
  /VARIABLES=AVA ACE WOP SOC COM FVI
```

```
/PRINT=SPEARMAN TWOTAIL NOSIG
/MISSING=PAIRWISE.
```

Nonparametric Correlations

Nonparametric Correlations - Correlations - August 17, 2019

Correlations

			Availability	Accessibility	Workplace	Social Climate	Communication	F&V Intake
Spearman's rho	Availability	Correlation Coefficient	1,000	,296**	,312**	,114*	,458**	,150**
		Sig. (2-tailed)	.	,000	,000	,026	,000	,003
		N	393	384	382	379	374	393
	Accessibility	Correlation Coefficient	,296**	1,000	,160**	,025	,135**	,061
		Sig. (2-tailed)	,000	.	,002	,624	,009	,232
		N	384	384	382	379	374	384
	Workplace	Correlation Coefficient	,312**	,160**	1,000	,159**	,390**	,219**
		Sig. (2-tailed)	,000	,002	.	,002	,000	,000
		N	382	382	382	379	374	382
	Social Climate	Correlation Coefficient	,114*	,025	,159**	1,000	,158**	,196**
		Sig. (2-tailed)	,026	,624	,002	.	,002	,000
		N	379	379	379	379	374	379
	Communication	Correlation Coefficient	,458**	,135**	,390**	,158**	1,000	,114*
		Sig. (2-tailed)	,000	,009	,000	,002	.	,028
		N	374	374	374	374	374	374
	F&V Intake	Correlation Coefficient	,150**	,061	,219**	,196**	,114*	1,000
		Sig. (2-tailed)	,003	,232	,000	,000	,028	.
		N	393	384	382	379	374	395

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Log

Log - Log - August 17, 2019

```
SORT CASES  BY OrPo.
SPLIT FILE LAYERED BY OrPo.
CORRELATIONS
  /VARIABLES=AVA ACE WOP SOC COM FVI
  /PRINT=TWOTAIL NOSIG
  /STATISTICS DESCRIPTIVES XPROD
  /MISSING=PAIRWISE.
```

Correlations

Correlations - Descriptive Statistics - August 17, 2019

Descriptive Statistics

Organizational Position		Mean	Std. Deviation	N
.	Availability	.	.	0
	Accessibility	.	.	0
	Workplace	.	.	0
	Social Climate	.	.	0
	Communication	.	.	0
	F&V Intake	.	.	0
Administraive staff	Availability	3,0478	,97552	115
	Accessibility	3,3795	,79765	112
	Workplace	3,0893	,70460	112
	Social Climate	2,5357	,82940	112
	Communication	2,7928	,67241	111
	F&V Intake	1,8261	,65240	115
Manager	Availability	3,2014	,98856	139
	Accessibility	3,3504	,80751	137
	Workplace	3,1296	,79636	135
	Social Climate	2,4179	,73114	134
	Communication	2,8664	,67603	131
	F&V Intake	1,9357	,67813	140
Senior Manager	Availability	2,8824	,98279	51
	Accessibility	3,4388	,70440	49
	Workplace	3,1224	,81350	49
	Social Climate	2,4388	,62610	49
	Communication	2,6633	,58084	49
	F&V Intake	2,0098	,71757	51
Executive Manager	Availability	2,7143	,96917	21
	Accessibility	3,8500	,79637	20
	Workplace	2,6250	,88667	20
	Social Climate	2,3750	,70478	20
	Communication	2,4750	,67814	20
	F&V Intake	2,0476	,74001	21
Owner, Board Member or similar	Availability	2,6364	1,22660	11
	Accessibility	3,1818	,87386	11
	Workplace	2,1364	,59544	11
	Social Climate	2,0000	,62361	10
	Communication	2,0000	,62361	10
	F&V Intake	1,7273	,46710	11
Other white-collar job	Availability	3,1786	,83899	56
	Accessibility	3,4545	,64026	55
	Workplace	3,2636	,75065	55
	Social Climate	2,5833	,76940	54
	Communication	3,0000	,60447	53
	F&V Intake	2,2368	,82972	57

Correlations

Correlations - Correlations - August 17, 2019

Correlations

Organizational Position			Availability	Accessibility	Workplace	Social Climate	Communication	F&V Intake
.	Availability	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
		Sig. (2-tailed)		.	.	.	.	.
		Sum of Squares and Cross-products	.	.	.	.	.	.
		Covariance	.	.	.	.	.	.
		N	0	0	0	0	0	0
	Accessibility	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
		Sig. (2-	.		.	.	.	.

		tailed)						
		Sum of Squares and Cross-products	.	.	.	.	.	.
		Covariance	.	.	.	.	.	.
		N	0	0	0	0	0	0
	Workplace	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
		Sig. (2-tailed)	.	.		.	.	.
		Sum of Squares and Cross-products	.	.	.	.	.	.
		Covariance	.	.	.	.	.	.
		N	0	0	0	0	0	0
	Social Climate	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
		Sig. (2-tailed)	.	.	.		.	.
		Sum of Squares and Cross-products	.	.	.	.	.	.
		Covariance	.	.	.	.	.	.
		N	0	0	0	0	0	0
	Communication	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
		Sig. (2-tailed)	.	.	.	.		.
		Sum of Squares and Cross-products	.	.	.	.	.	.
		Covariance	.	.	.	.	.	.
		N	0	0	0	0	0	0
	F&V Intake	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
		Sig. (2-tailed)	.	.	.	.	.	
		Sum of Squares and Cross-products	.	.	.	.	.	.
		Covariance	.	.	.	.	.	.
		N	0	0	0	0	0	0
Administraive staff	Availability	Pearson Correlation	1	,359[**]	,211[*]	,114	,324[**]	,158
		Sig. (2-tailed)		,000	,026	,233	,001	,092
		Sum of Squares and Cross-products	108,487	31,223	16,214	10,286	23,640	11,457
		Covariance	,952	,281	,146	,093	,215	,100
		N	115	112	112	112	111	115
	Accessibility	Pearson Correlation	,359[**]	1	,087	-,068	,202[*]	-,169
		Sig. (2-tailed)	,000		,359	,474	,033	,076
		Sum of Squares and Cross-products	31,223	70,623	5,455	-5,018	11,910	-9,850
		Covariance	,281	,636	,049	-,045	,108	-,089
		N	112	112	112	112	111	112
	Workplace	Pearson Correlation	,211[*]	,087	1	,095	,449[**]	,198[*]
		Sig. (2-tailed)	,026	,359		,321	,000	,036
		Sum of Squares and Cross-products	16,214	5,455	55,107	6,143	23,468	10,241
		Covariance	,146	,049	,496	,055	,213	,092
		N	112	112	112	112	111	112
	Social Climate	Pearson Correlation	,114	-,068	,095	1	,076	,213[*]
		Sig. (2-tailed)	,233	,474	,321		,427	,024
		Sum of Squares and Cross-	10,286	-5,018	6,143	76,357	4,682	12,946

		products						
		Covariance	,093	-,045	,055	,688	,043	,117
		N	112	112	112	112	111	112
	Communication	Pearson Correlation	,324**	,202*	,449**	,076	1	,134
		Sig. (2-tailed)	,001	,033	,000	,427		,161
		Sum of Squares and Cross-products	23,640	11,910	23,468	4,682	49,734	6,563
		Covariance	,215	,108	,213	,043	,452	,060
		N	111	111	111	111	111	111
	F&V Intake	Pearson Correlation	,158	-,169	,198*	,213*	,134	1
		Sig. (2-tailed)	,092	,076	,036	,024	,161	
		Sum of Squares and Cross-products	11,457	-9,850	10,241	12,946	6,563	48,522
		Covariance	,100	-,089	,092	,117	,060	,426
		N	115	112	112	112	111	115
Manager	Availability	Pearson Correlation	1	,371**	,329**	,083	,458**	,198*
		Sig. (2-tailed)		,000	,000	,340	,000	,020
		Sum of Squares and Cross-products	134,860	40,066	34,500	7,966	39,406	17,716
		Covariance	,977	,295	,257	,060	,303	,128
		N	139	137	135	134	131	139
	Accessibility	Pearson Correlation	,371**	1	,263**	,058	,027	,155
		Sig. (2-tailed)	,000		,002	,505	,758	,070
		Sum of Squares and Cross-products	40,066	88,682	22,333	4,522	1,895	11,055
		Covariance	,295	,652	,167	,034	,015	,081
		N	137	137	135	134	131	137
	Workplace	Pearson Correlation	,329**	,263**	1	,225**	,404**	,295**
		Sig. (2-tailed)	,000	,002		,009	,000	,001
		Sum of Squares and Cross-products	34,500	22,333	84,981	17,478	27,855	20,500
		Covariance	,257	,167	,634	,131	,214	,153
		N	135	135	135	134	131	135
	Social Climate	Pearson Correlation	,083	,058	,225**	1	,121	,222**
		Sig. (2-tailed)	,340	,505	,009		,170	,010
		Sum of Squares and Cross-products	7,966	4,522	17,478	71,097	7,548	14,101
		Covariance	,060	,034	,131	,535	,058	,106
		N	134	134	134	134	131	134
	Communication	Pearson Correlation	,458**	,027	,404**	,121	1	,117
		Sig. (2-tailed)	,000	,758	,000	,170		,184
		Sum of Squares and Cross-products	39,406	1,895	27,855	7,548	59,412	6,697
		Covariance	,303	,015	,214	,058	,457	,052
		N	131	131	131	131	131	131
	F&V Intake	Pearson Correlation	,198*	,155	,295**	,222**	,117	1
		Sig. (2-tailed)	,020	,070	,001	,010	,184	
		Sum of Squares and Cross-products	17,716	11,055	20,500	14,101	6,697	63,921
		Covariance	,128	,081	,153	,106	,052	,460
		N	139	137	135	134	131	140

Senior Manager	Availability	Pearson Correlation	1	,277	,399**	,220	,460**	,087
		Sig. (2-tailed)		,054	,005	,129	,001	,545
		Sum of Squares and Cross-products	48,294	9,352	15,546	6,602	12,811	3,059
		Covariance	,966	,195	,324	,138	,267	,061
		N	51	49	49	49	49	51
	Accessibility	Pearson Correlation	,277	1	-,059	,168	,305*	-,018
		Sig. (2-tailed)	,054		,685	,247	,033	,903
		Sum of Squares and Cross-products	9,352	23,816	-1,633	3,566	5,990	-,439
		Covariance	,195	,496	-,034	,074	,125	-,009
		N	49	49	49	49	49	49
	Workplace	Pearson Correlation	,399**	-,059	1	,168	,287*	,259
		Sig. (2-tailed)	,005	,685		,247	,045	,072
		Sum of Squares and Cross-products	15,546	-1,633	31,765	4,117	6,520	7,378
		Covariance	,324	-,034	,662	,086	,136	,154
		N	49	49	49	49	49	49
	Social Climate	Pearson Correlation	,220	,168	,168	1	,257	,014
		Sig. (2-tailed)	,129	,247	,247		,074	,923
		Sum of Squares and Cross-products	6,602	3,566	4,117	18,816	4,490	,311
		Covariance	,138	,074	,086	,392	,094	,006
		N	49	49	49	49	49	49
	Communication	Pearson Correlation	,460**	,305*	,287*	,257	1	,263
		Sig. (2-tailed)	,001	,033	,045	,074		,068
		Sum of Squares and Cross-products	12,811	5,990	6,520	4,490	16,194	5,337
		Covariance	,267	,125	,136	,094	,337	,111
		N	49	49	49	49	49	49
	F&V Intake	Pearson Correlation	,087	-,018	,259	,014	,263	1
		Sig. (2-tailed)	,545	,903	,072	,923	,068	
		Sum of Squares and Cross-products	3,059	-,439	7,378	,311	5,337	25,745
		Covariance	,061	-,009	,154	,006	,111	,515
		N	51	49	49	49	49	51
Executive Manager	Availability	Pearson Correlation	1	,090	,269	,263	,673**	,124
		Sig. (2-tailed)		,706	,251	,262	,001	,591
		Sum of Squares and Cross-products	18,786	1,350	4,500	3,500	8,600	1,786
		Covariance	,939	,071	,237	,184	,453	,089
		N	21	20	20	20	20	21
	Accessibility	Pearson Correlation	,090	1	-,084	-,059	,334	,241
		Sig. (2-tailed)	,706		,725	,806	,150	,307
		Sum of Squares and Cross-products	1,350	12,050	-1,125	-,625	3,425	2,725
		Covariance	,071	,634	-,059	-,033	,180	,143
		N	20	20	20	20	20	20
	Workplace	Pearson Correlation	,269	-,084	1	,363	,443	,421
		Sig. (2-tailed)	,251	,725		,115	,050	,064

		Sum of Squares and Cross-products	4,500	-1,125	14,938	4,313	5,063	5,313
		Covariance	,237	-,059	,786	,227	,266	,280
		N	20	20	20	20	20	20
	Social Climate	Pearson Correlation	,263	-,059	,363	1	,131	,393
		Sig. (2-tailed)	,262	,806	,115		,583	,087
		Sum of Squares and Cross-products	3,500	-,625	4,313	9,438	1,188	3,938
		Covariance	,184	-,033	,227	,497	,063	,207
		N	20	20	20	20	20	20
	Communication	Pearson Correlation	,673**	,334	,443	,131	1	-,022
		Sig. (2-tailed)	,001	,150	,050	,583		,927
		Sum of Squares and Cross-products	8,600	3,425	5,063	1,188	8,738	-,213
		Covariance	,453	,180	,266	,063	,460	-,011
		N	20	20	20	20	20	20
	F&V Intake	Pearson Correlation	,124	,241	,421	,393	-,022	1
		Sig. (2-tailed)	,591	,307	,064	,087	,927	
		Sum of Squares and Cross-products	1,786	2,725	5,313	3,938	-,213	10,952
		Covariance	,089	,143	,280	,207	-,011	,548
		N	21	20	20	20	20	21
Owner, Board Member or similar	Availability	Pearson Correlation	1	,021	,622*	,105	,245	,246
		Sig. (2-tailed)		,951	,041	,773	,495	,466
		Sum of Squares and Cross-products	15,045	,227	4,545	,750	1,750	1,409
		Covariance	1,505	,023	,455	,083	,194	,141
		N	11	11	11	10	10	11
	Accessibility	Pearson Correlation	,021	1	-,245	-,097	-,291	-,111
		Sig. (2-tailed)	,951		,469	,790	,415	,744
		Sum of Squares and Cross-products	,227	7,636	-1,273	-,500	-1,500	-,455
		Covariance	,023	,764	-,127	-,056	-,167	-,045
		N	11	11	11	10	10	11
	Workplace	Pearson Correlation	,622*	-,245	1	,498	,783**	,327
		Sig. (2-tailed)	,041	,469		,143	,007	,327
		Sum of Squares and Cross-products	4,545	-1,273	3,545	1,750	2,750	,909
		Covariance	,455	-,127	,355	,194	,306	,091
		N	11	11	11	10	10	11
	Social Climate	Pearson Correlation	,105	-,097	,498	1	,429	,458
		Sig. (2-tailed)	,773	,790	,143		,217	,183
		Sum of Squares and Cross-products	,750	-,500	1,750	3,500	1,500	1,250
		Covariance	,083	-,056	,194	,389	,167	,139
		N	10	10	10	10	10	10
	Communication	Pearson Correlation	,245	-,291	,783**	,429	1	,092
		Sig. (2-tailed)	,495	,415	,007	,217		,801
		Sum of Squares and Cross-products	1,750	-1,500	2,750	1,500	3,500	,250

		Covariance	,194	-,167	,306	,167	,389	,028
		N	10	10	10	10	10	10
	F&V Intake	Pearson Correlation	,246	-,111	,327	,458	,092	1
		Sig. (2-tailed)	,466	,744	,327	,183	,801	
		Sum of Squares and Cross-products	1,409	-,455	,909	1,250	,250	2,182
		Covariance	,141	-,045	,091	,139	,028	,218
		N	11	11	11	10	10	11
Other white-collar job	Availability	Pearson Correlation	1	,059	,293*	,137	,471**	,173
		Sig. (2-tailed)		,667	,030	,323	,000	,202
		Sum of Squares and Cross-products	38,714	1,727	9,982	4,708	12,500	6,679
		Covariance	,704	,032	,185	,089	,240	,121
		N	56	55	55	54	53	56
	Accessibility	Pearson Correlation	,059	1	,324*	,226	,000	,118
		Sig. (2-tailed)	,667		,016	,101	1,000	,389
		Sum of Squares and Cross-products	1,727	22,136	8,409	5,917	,000	3,386
		Covariance	,032	,410	,156	,112	,000	,063
		N	55	55	55	54	53	55
	Workplace	Pearson Correlation	,293*	,324*	1	,106	,089	,315*
		Sig. (2-tailed)	,030	,016		,445	,528	,019
		Sum of Squares and Cross-products	9,982	8,409	30,427	3,250	2,000	10,559
		Covariance	,185	,156	,563	,061	,038	,196
		N	55	55	55	54	53	55
	Social Climate	Pearson Correlation	,137	,226	,106	1	,297*	,298*
		Sig. (2-tailed)	,323	,101	,445		,031	,029
		Sum of Squares and Cross-products	4,708	5,917	3,250	31,375	7,250	10,125
		Covariance	,089	,112	,061	,592	,139	,191
		N	54	54	54	54	53	54
	Communication	Pearson Correlation	,471**	,000	,089	,297*	1	,241
		Sig. (2-tailed)	,000	1,000	,528	,031		,082
		Sum of Squares and Cross-products	12,500	,000	2,000	7,250	19,000	6,250
		Covariance	,240	,000	,038	,139	,365	,120
		N	53	53	53	53	53	53
	F&V Intake	Pearson Correlation	,173	,118	,315*	,298*	,241	1
		Sig. (2-tailed)	,202	,389	,019	,029	,082	
		Sum of Squares and Cross-products	6,679	3,386	10,559	10,125	6,250	38,553
		Covariance	,121	,063	,196	,191	,120	,688
		N	56	55	55	54	53	57

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.

Log

Log - Log - August 17, 2019

```
NONPAR CORR
  /VARIABLES=AVA ACE WOP SOC COM FVI
  /PRINT=SPEARMAN TWOTAIL NOSIG
  /MISSING=PAIRWISE.
```

Nonparametric Correlations

Nonparametric Correlations - Correlations - August 17, 2019

Correlations

Organizational Position				Availability	Accessibility	Workplace	Social Climate	Communication	F&V Intake
.	Spearman's rho	Availability	Correlation Coefficient	.	.	.	.	.	.
			Sig. (2-tailed)	.	.	.	.	.	.
			N	0	0	0	0	0	0
		Accessibility	Correlation Coefficient	.	.	.	.	.	.
			Sig. (2-tailed)	.	.	.	.	.	.
			N	0	0	0	0	0	0
		Workplace	Correlation Coefficient	.	.	.	.	.	.
			Sig. (2-tailed)	.	.	.	.	.	.
			N	0	0	0	0	0	0
		Social Climate	Correlation Coefficient	.	.	.	.	.	.
			Sig. (2-tailed)	.	.	.	.	.	.
			N	0	0	0	0	0	0
		Communication	Correlation Coefficient	.	.	.	.	.	.
			Sig. (2-tailed)	.	.	.	.	.	.
			N	0	0	0	0	0	0
		F&V Intake	Correlation Coefficient	.	.	.	.	.	.
			Sig. (2-tailed)	.	.	.	.	.	.
			N	0	0	0	0	0	0
Administraive staff	Spearman's rho	Availability	Correlation Coefficient	1,000	,310**	,199*	,103	,385**	,162
			Sig. (2-tailed)	.	,001	,036	,280	,000	,083
			N	115	112	112	112	111	115
		Accessibility	Correlation Coefficient	,310**	1,000	,070	-,058	,226*	-,171
			Sig. (2-tailed)	,001	.	,463	,541	,017	,071
			N	112	112	112	112	111	112
		Workplace	Correlation Coefficient	,199*	,070	1,000	,050	,468**	,151
			Sig. (2-tailed)	,036	,463	.	,601	,000	,111
			N	112	112	112	112	111	112
		Social Climate	Correlation Coefficient	,103	-,058	,050	1,000	,069	,215*
			Sig. (2-tailed)	,280	,541	,601	.	,470	,023
			N	112	112	112	112	111	112
		Communication	Correlation Coefficient	,385**	,226*	,468**	,069	1,000	,101
			Sig. (2-tailed)	,000	,017	,000	,470	.	,291
			N	111	111	111	111	111	111
		F&V Intake	Correlation Coefficient	,162	-,171	,151	,215*	,101	1,000
			Sig. (2-tailed)	,083	,071	,111	,023	,291	.
			N	115	112	112	112	111	115
Manager	Spearman's rho	Availability	Correlation Coefficient	1,000	,403**	,322**	,059	,446**	,166
			Sig. (2-tailed)	.	,000	,000	,495	,000	,051
			N	139	137	135	134	131	139
		Accessibility	Correlation Coefficient	,403**	1,000	,273**	-,019	,056	,161
			Sig. (2-tailed)	,000	.	,001	,828	,528	,059

			N	137	137	135	134	131	137
		Workplace	Correlation Coefficient	,322**	,273**	1,000	,207*	,392**	,219*
			Sig. (2-tailed)	,000	,001	.	,016	,000	,011
			N	135	135	135	134	131	135
		Social Climate	Correlation Coefficient	,059	-,019	,207*	1,000	,125	,211*
			Sig. (2-tailed)	,495	,828	,016	.	,156	,014
			N	134	134	134	134	131	134
		Communication	Correlation Coefficient	,446**	,056	,392**	,125	1,000	,074
			Sig. (2-tailed)	,000	,528	,000	,156	.	,403
			N	131	131	131	131	131	131
		F&V Intake	Correlation Coefficient	,166	,161	,219*	,211*	,074	1,000
			Sig. (2-tailed)	,051	,059	,011	,014	,403	.
			N	139	137	135	134	131	140
Senior Manager	Spearman's rho	Availability	Correlation Coefficient	1,000	,312*	,329*	,221	,472**	,065
			Sig. (2-tailed)	.	,029	,021	,126	,001	,653
			N	51	49	49	49	49	51
		Accessibility	Correlation Coefficient	,312*	1,000	-,022	,188	,293*	-,004
			Sig. (2-tailed)	,029	.	,879	,196	,041	,979
			N	49	49	49	49	49	49
		Workplace	Correlation Coefficient	,329*	-,022	1,000	,131	,144	,249
			Sig. (2-tailed)	,021	,879	.	,368	,325	,084
			N	49	49	49	49	49	49
		Social Climate	Correlation Coefficient	,221	,188	,131	1,000	,220	-,001
			Sig. (2-tailed)	,126	,196	,368	.	,128	,997
			N	49	49	49	49	49	49
		Communication	Correlation Coefficient	,472**	,293*	,144	,220	1,000	,199
			Sig. (2-tailed)	,001	,041	,325	,128	.	,170
			N	49	49	49	49	49	49
		F&V Intake	Correlation Coefficient	,065	-,004	,249	-,001	,199	1,000
			Sig. (2-tailed)	,653	,979	,084	,997	,170	.
			N	51	49	49	49	49	51
Executive Manager	Spearman's rho	Availability	Correlation Coefficient	1,000	,043	,288	,201	,513*	-,040
			Sig. (2-tailed)	.	,857	,218	,395	,021	,863
			N	21	20	20	20	20	21
		Accessibility	Correlation Coefficient	,043	1,000	-,059	,005	,391	,303
			Sig. (2-tailed)	,857	.	,804	,983	,089	,193
			N	20	20	20	20	20	20
		Workplace	Correlation Coefficient	,288	-,059	1,000	,272	,447*	,429
			Sig. (2-tailed)	,218	,804	.	,247	,048	,059
			N	20	20	20	20	20	20
		Social Climate	Correlation Coefficient	,201	,005	,272	1,000	,132	,424
			Sig. (2-tailed)	,395	,983	,247	.	,580	,062
			N	20	20	20	20	20	20
		Communication	Correlation Coefficient	,513*	,391	,447*	,132	1,000	,016
			Sig. (2-tailed)	,021	,089	,048	,580	.	,947
			N	20	20	20	20	20	20
		F&V Intake	Correlation Coefficient	-,040	,303	,429	,424	,016	1,000
			Sig. (2-tailed)	,863	,193	,059	,062	,947	.
			N	21	20	20	20	20	21

Owner, Board Member or similar	Spearman's rho	Availability	Correlation Coefficient	1,000	-,030	,542	,063	,263	,237
			Sig. (2-tailed)	.	,929	,085	,863	,463	,482
			N	11	11	11	10	10	11
		Accessibility	Correlation Coefficient	-,030	1,000	-,331	-,050	-,308	-,138
			Sig. (2-tailed)	,929	.	,320	,890	,387	,687
			N	11	11	11	10	10	11
		Workplace	Correlation Coefficient	,542	-,331	1,000	,447	,801**	,354
			Sig. (2-tailed)	,085	,320	.	,196	,005	,286
			N	11	11	11	10	10	11
		Social Climate	Correlation Coefficient	,063	-,050	,447	1,000	,418	,465
			Sig. (2-tailed)	,863	,890	,196	.	,229	,175
			N	10	10	10	10	10	10
		Communication	Correlation Coefficient	,263	-,308	,801**	,418	1,000	,182
			Sig. (2-tailed)	,463	,387	,005	,229	.	,615
			N	10	10	10	10	10	10
		F&V Intake	Correlation Coefficient	,237	-,138	,354	,465	,182	1,000
			Sig. (2-tailed)	,482	,687	,286	,175	,615	.
			N	11	11	11	10	10	11
Other white-collar job	Spearman's rho	Availability	Correlation Coefficient	1,000	,137	,286*	,076	,468**	,148
			Sig. (2-tailed)	.	,318	,034	,584	,000	,276
			N	56	55	55	54	53	56
		Accessibility	Correlation Coefficient	,137	1,000	,362**	,232	,016	,145
			Sig. (2-tailed)	,318	.	,007	,092	,911	,290
			N	55	55	55	54	53	55
		Workplace	Correlation Coefficient	,286*	,362**	1,000	,093	,077	,273*
			Sig. (2-tailed)	,034	,007	.	,503	,584	,044
			N	55	55	55	54	53	55
		Social Climate	Correlation Coefficient	,076	,232	,093	1,000	,271*	,202
			Sig. (2-tailed)	,584	,092	,503	.	,049	,143
			N	54	54	54	54	53	54
		Communication	Correlation Coefficient	,468**	,016	,077	,271*	1,000	,230
			Sig. (2-tailed)	,000	,911	,584	,049	.	,097
			N	53	53	53	53	53	53
		F&V Intake	Correlation Coefficient	,148	,145	,273*	,202	,230	1,000
			Sig. (2-tailed)	,276	,290	,044	,143	,097	.
			N	56	55	55	54	53	57

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 10 - Standard Multiple Regression

IBM SPSS Web Report - Standard multiple regression.spv

Log
Log - Log - August 18, 2019

```
SET TLook=None Small=0 SUMMARY=None THREADS=AUTO TFit=Both DIGITGROUPING=No LEADZERO=No TABLERENDER=light.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING PAIRWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT FVI
  /METHOD=ENTER AVA ACE WOP SOC COM
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression
Regression - Active Dataset - August 18, 2019

[DataSet1] /Users/christiaklein/OneDrive - University of Worcester/Christian's Research/Christian'

Regression
Regression - Descriptive Statistics - August 18, 2019

Descriptive Statistics

	Mean	Std. Deviation	N
F&V Intake	1,9570	,70759	395
Availability	3,0700	,97654	393
Accessibility	3,4063	,77514	384
Workplace	3,0812	,78857	382
Social Climate	2,4657	,75339	379
Communication	2,7928	,67250	374

Regression
Regression - Correlations - August 18, 2019

Correlations

		F&V Intake	Availability	Accessibility	Workplace	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,162	,047	,278	,222	,157
	Availability	,162	1,000	,278	,322	,129	,438
	Accessibility	,047	,278	1,000	,133	,038	,105
	Workplace	,278	,322	,133	1,000	,192	,410
	Social Climate	,222	,129	,038	,192	1,000	,171
	Communication	,157	,438	,105	,410	,171	1,000
Sig. (1-tailed)	F&V Intake	.	,001	,181	,000	,000	,001
	Availability	,001	.	,000	,000	,005	,000
	Accessibility	,181	,000	.	,005	,230	,021
	Workplace	,000	,000	,005	.	,000	,000
	Social Climate	,000	,005	,230	,000	.	,000
	Communication	,001	,000	,021	,000	,000	.
N	F&V Intake	395	393	384	382	379	374
	Availability	393	393	384	382	379	374
	Accessibility	384	384	384	382	379	374
	Workplace	382	382	382	382	379	374
	Social Climate	379	379	379	379	379	374
	Communication	374	374	374	374	374	374

Regression

Regression - Variables Entered/Removed - August 18, 2019

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Communication, Accessibility, Social Climate, Workplace, Availability[b]	.	Enter

a. Dependent Variable: F&V Intake

b. All requested variables entered.

Regression

Regression - Model Summary - August 18, 2019

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,333[a]	,111	,099	,67165

a. Predictors: (Constant), Communication, Accessibility, Social Climate, Workplace, Availability

b. Dependent Variable: F&V Intake

Regression

Regression - ANOVA - August 18, 2019

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20,742	5	4,148	9,196	,000[b]
	Residual	166,012	368	,451		
	Total	186,754	373			

a. Dependent Variable: F&V Intake

b. Predictors: (Constant), Communication, Accessibility, Social Climate, Workplace, Availability

Regression

Regression - Coefficients - August 18, 2019

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	,803	,229		3,508	,001	,353	1,254					
	Availability	,048	,042	,067	1,162	,246	-,033	,130	,162	,060	,057	,735	1,361
	Accessibility	-,008	,047	-,009	-,171	,864	-,100	,084	,047	-,009	-,008	,919	1,088
	Workplace	,199	,050	,221	4,009	,000	,101	,296	,278	,205	,197	,792	1,263
	Social Climate	,159	,047	,169	3,364	,001	,066	,252	,222	,173	,165	,951	1,051
	Communication	,010	,061	,010	,164	,869	-,110	,130	,157	,009	,008	,722	1,386

a. Dependent Variable: F&V Intake

Regression

Regression - Collinearity Diagnostics - August 18, 2019

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace	Social Climate	Communication
1	1	5,764	1,000	,00	,00	,00	,00	,00	,00
	2	,080	8,463	,00	,24	,01	,00	,67	,01
	3	,055	10,235	,04	,29	,45	,00	,11	,03
	4	,050	10,593	,00	,34	,08	,45	,13	,09
	5	,033	13,221	,02	,09	,01	,51	,01	,68
	6	,017	18,256	,94	,03	,45	,03	,09	,19

a. Dependent Variable: F&V Intake

Regression

Regression - Casewise Diagnostics - August 18, 2019

Casewise Diagnostics[a]

Case Number	Std. Residual	F&V Intake	Predicted Value	Residual
219	3,223	4,50	2,3355	2,16454
408	3,081	4,00	1,9304	2,06955

a. Dependent Variable: F&V Intake

Regression

Regression - Residuals Statistics - August 18, 2019

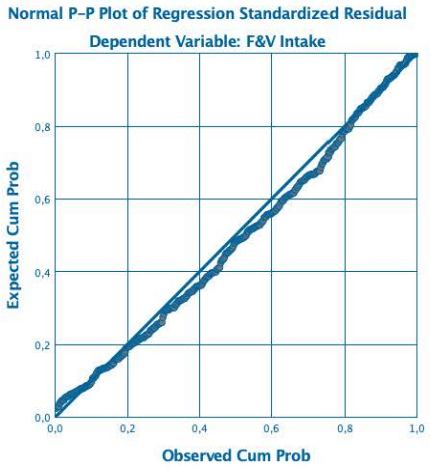
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,1955	2,6317	1,9587	,23327	374
Std. Predicted Value	-3,229	2,861	,007	,989	374
Standard Error of Predicted Value	,038	,161	,082	,022	374
Adjusted Predicted Value	1,2027	2,6154	1,9584	,23309	374
Residual	-1,32371	2,16454	-,01352	,66498	374
Std. Residual	-1,971	3,223	-,020	,990	374
Stud. Residual	-1,988	3,262	-,020	,999	374
Deleted Residual	-1,34655	2,21725	-,01326	,67748	374
Stud. Deleted Residual	-1,996	3,305	-,019	1,002	374
Mahal. Distance	,223	20,404	4,943	3,261	374
Cook's Distance	,000	,070	,003	,007	374
Centered Leverage Value	,001	,055	,013	,009	374

a. Dependent Variable: F&V Intake

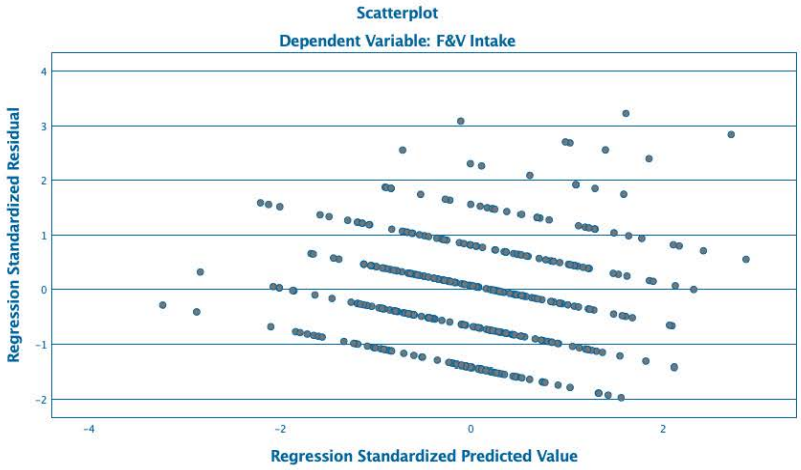
Charts

Charts - *zresid Normal P-P Plot - August 18, 2019



Charts

Charts - *zresid by *zpred Scatterplot - August 18, 2019



Appendix 11 - Standard Multiple Regression Hierarchy Positions

IBM SPSS Web Report - Standard multiple regression_org position.spv

Log

Log - Log - January 25, 2020

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING PAIRWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT FVI
  /METHOD=ENTER AVA ACE WOP SOC COM
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression

Regression - Active Dataset - January 25, 2020

[DataSet1] /Users/christianklein/OneDrive - University of Worcester/Christian's Research/Christia

Regression

Regression - Warnings - January 25, 2020

Warnings

There are no valid cases in split file Organizational Position=. for models with dependent variable F&V Intake. Statistics cannot be computed.
No valid cases found in split file Organizational Position=. Equation-building skipped.

Organizational Position = .

Organizational Position = . - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	,0000	.	0
Availability	,0000	.	0
Accessibility	,0000	.	0
Workplace Design	,0000	.	0
Social Climate	,0000	.	0
Communication	,0000	.	0

a. Organizational Position = .

Organizational Position = .

Organizational Position = . - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	.	.	.	.	.
	Availability	.	1,000	.	.	.	.
	Accessibility	.	.	1,000	.	.	.
	Workplace Design	.	.	.	1,000	.	.
	Social Climate	.	.	.	.	1,000	.
	Communication	.	.	.	.	.	1,000
Sig. (1-tailed)	F&V Intake	.	.	.	.	.	.
	Availability	.	.	.	.	.	.
	Accessibility	.	.	.	.	.	.
	Workplace Design	.	.	.	.	.	.
	Social Climate	.	.	.	.	.	.
	Communication	.	.	.	.	.	.
N	F&V Intake	0	0	0	0	0	0
	Availability	0	0	0	0	0	0
	Accessibility	0	0	0	0	0	0
	Workplace Design	0	0	0	0	0	0
	Social Climate	0	0	0	0	0	0
	Communication	0	0	0	0	0	0

a. Organizational Position = .

Organizational Position = Administraive staff

Organizational Position = Administraive staff - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	1,8251	,65240	115
Availability	3,0478	,97552	115
Accessibility	3,3795	,79765	112
Workplace Design	3,0893	,70460	112
Social Climate	2,5357	,82940	112
Communication	2,7928	,67241	111

a. Organizational Position = Administraive staff

Organizational Position = Administraive staff

Organizational Position = Administraive staff - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,158	-,169	,198	,213	,134
	Availability	,158	1,000	,359	,211	,114	,324
	Accessibility	-,169	,359	1,000	,087	-,068	,202
	Workplace Design	,198	,211	,087	1,000	,095	,449
	Social Climate	,213	,114	-,068	,095	1,000	,076
	Communication	,134	,324	,202	,449	,076	1,000
Sig. (1-tailed)	F&V Intake	.	,046	,038	,018	,012	,080
	Availability	,046	.	,000	,013	,116	,000
	Accessibility	,038	,000	.	,180	,237	,017
	Workplace Design	,018	,013	,180	.	,160	,000
	Social Climate	,012	,116	,237	,160	.	,214
	Communication	,080	,000	,017	,000	,214	.
N	F&V Intake	115	115	112	112	112	111
	Availability	115	115	112	112	112	111
	Accessibility	112	112	112	112	112	111
	Workplace Design	112	112	112	112	112	111
	Social Climate	112	112	112	112	112	111
	Communication	111	111	111	111	111	111

a. Organizational Position = Administraive staff

Organizational Position = Administraive staff

Organizational Position = Administraive staff - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Social Climate, Accessibility, Workplace Design, Availability[c]	.	Enter

a. Organizational Position = Administraive staff

b. Dependent Variable: F&V Intake

c. All requested variables entered.

Organizational Position = Administraive staff

Organizational Position = Administraive staff - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,373[b]	,139	,098	,61963

a. Organizational Position = Administraive staff

b. Predictors: (Constant), Communication, Social Climate, Accessibility, Workplace Design, Availability

c. Dependent Variable: F&V Intake

Organizational Position = Administraive staff

Organizational Position = Administraive staff - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6,506	5	1,301	3,389	,007[c]
	Residual	40,313	105	,384		
	Total	46,819	110			

a. Organizational Position = Administraive staff

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Social Climate, Accessibility, Workplace Design, Availability

Organizational Position = Administraive staff

Organizational Position = Administraive staff - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1,274	,403		3,159	,002	,474	2,074					
	Availability	,122	,068	,182	1,783	,077	-,014	,257	,158	,171	,161	,787	1,270
	Accessibility	-,201	,080	-,245	-2,497	,014	-,360	-,041	-,169	-,237	-,226	,850	1,177
	Workplace Design	,134	,094	,145	1,426	,157	-,053	,321	,198	,138	,129	,790	1,265
	Social Climate	,124	,072	,158	1,719	,089	-,019	,268	,213	,165	,156	,967	1,034
	Communication	,046	,102	,047	,448	,655	-,157	,249	,134	,044	,041	,735	1,360

a. Organizational Position = Administraive staff

b. Dependent Variable: F&V Intake

Organizational Position = Administraive staff

Organizational Position = Administraive staff - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,752	1,000	,00	,00	,00	,00	,00	,00
	2	,094	7,818	,00	,10	,05	,00	,74	,01
	3	,063	9,564	,01	,63	,00	,14	,08	,08
	4	,047	11,115	,02	,23	,56	,08	,00	,09
	5	,028	14,278	,01	,03	,00	,55	,02	,80
	6	,016	18,779	,95	,01	,38	,22	,16	,01

a. Organizational Position = Administraive staff

b. Dependent Variable: F&V Intake

Organizational Position = Administraive staff

Organizational Position = Administraive staff - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

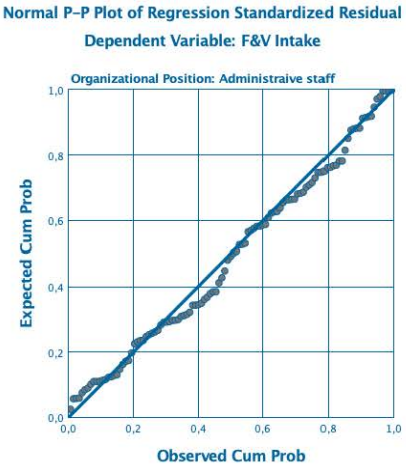
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,2393	2,5442	1,8248	,24372	111
Std. Predicted Value	-2,413	2,953	-,005	1,002	111
Standard Error of Predicted Value	,065	,255	,139	,040	111
Adjusted Predicted Value	1,2185	2,4907	1,8211	,24549	111
Residual	-1,21808	1,84728	,00402	,61270	111
Std. Residual	-1,966	2,981	,006	,989	111
Stud. Residual	-2,038	3,271	,009	1,024	111
Deleted Residual	-1,30976	2,22376	,00769	,65763	111
Stud. Deleted Residual	-2,070	3,435	,013	1,038	111
Mahal. Distance	,221	17,632	4,978	3,479	111
Cook's Distance	,000	,363	,013	,039	111
Centered Leverage Value	,002	,160	,045	,032	111

a. Organizational Position = Administraive staff

b. Dependent Variable: F&V Intake

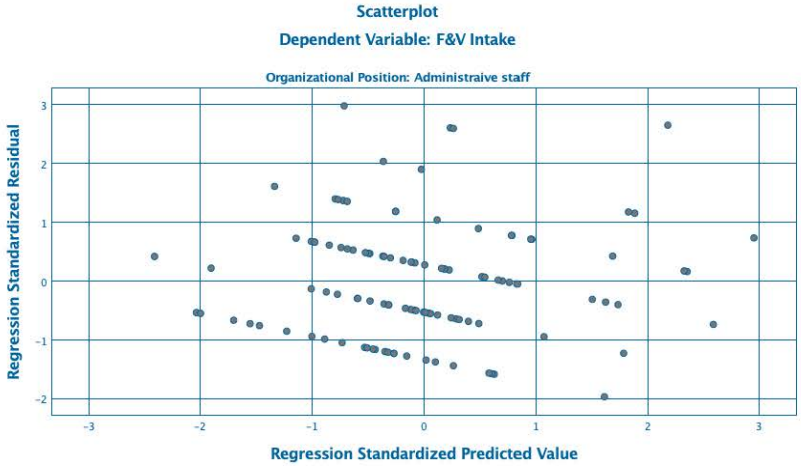
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



Organizational Position = Manager

Organizational Position = Manager - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	1,9357	,67813	140
Availability	3,2014	,98856	139
Accessibility	3,3504	,80751	137
Workplace Design	3,1296	,79636	135
Social Climate	2,4179	,73114	134
Communication	2,8664	,67603	131

a. Organizational Position = Manager

Organizational Position = Manager

Organizational Position = Manager - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,198	,155	,295	,222	,117
	Availability	,198	1,000	,371	,329	,083	,458
	Accessibility	,155	,371	1,000	,263	,058	,027
	Workplace Design	,295	,329	,263	1,000	,225	,404
	Social Climate	,222	,083	,058	,225	1,000	,121
	Communication	,117	,458	,027	,404	,121	1,000
Sig. (1-tailed)	F&V Intake	.	,010	,035	,000	,005	,092
	Availability	,010	.	,000	,000	,170	,000
	Accessibility	,035	,000	.	,001	,252	,379
	Workplace Design	,000	,000	,001	.	,004	,000
	Social Climate	,005	,170	,252	,004	.	,085
	Communication	,092	,000	,379	,000	,085	.
N	F&V Intake	140	139	137	135	134	131
	Availability	139	139	137	135	134	131
	Accessibility	137	137	137	135	134	131
	Workplace Design	135	135	135	135	134	131
	Social Climate	134	134	134	134	134	131
	Communication	131	131	131	131	131	131

a. Organizational Position = Manager

Organizational Position = Manager

Organizational Position = Manager - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Accessibility, Social Climate, Workplace Design, Availability[c]	.	Enter

a. Organizational Position = Manager

b. Dependent Variable: F&V Intake

c. All requested variables entered.

Organizational Position = Manager

Organizational Position = Manager - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,357[b]	,128	,093	,64588

a. Organizational Position = Manager

b. Predictors: (Constant), Communication, Accessibility, Social Climate, Workplace Design, Availability

c. Dependent Variable: F&V Intake

Organizational Position = Manager

Organizational Position = Manager - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7,637	5	1,527	3,661	,004[c]
	Residual	52,146	125	,417		
	Total	59,783	130			

a. Organizational Position = Manager

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Accessibility, Social Climate, Workplace Design, Availability

Organizational Position = Manager

Organizational Position = Manager - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	,722	,371		1,948	,054	-,012	1,457					
	Availability	,079	,071	,115	1,116	,266	-,061	,219	,198	,099	,093	,658	1,519
	Accessibility	,037	,079	,044	,473	,637	-,119	,193	,155	,042	,039	,794	1,260
	Workplace Design	,194	,083	,228	2,352	,020	,031	,358	,295	,206	,197	,742	1,348
	Social Climate	,153	,080	,165	1,921	,057	-,005	,310	,222	,169	,160	,948	1,055
	Communication	-,049	,102	-,049	-,485	,629	-,251	,152	,117	-,043	-,040	,678	1,475

a. Organizational Position = Manager

b. Dependent Variable: F&V Intake

Organizational Position = Manager

Organizational Position = Manager - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,770	1,000	,00	,00	,00	,00	,00	,00
	2	,083	8,340	,00	,19	,02	,00	,62	,01
	3	,054	10,370	,01	,02	,50	,02	,00	,22
	4	,046	11,235	,02	,52	,00	,37	,26	,02
	5	,032	13,393	,16	,15	,01	,60	,04	,26
	6	,016	19,105	,82	,12	,47	,01	,08	,49

a. Organizational Position = Manager

b. Dependent Variable: F&V Intake

Organizational Position = Manager

Organizational Position = Manager - Casewise Diagnostics - January 25, 2020

Casewise Diagnostics[a,b]

Case Number	Std. Residual	F&V Intake	Predicted Value	Residual
219	3,359	4,50	2,3305	2,16952

a. Organizational Position = Manager

b. Dependent Variable: F&V Intake

Organizational Position = Manager

Organizational Position = Manager - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

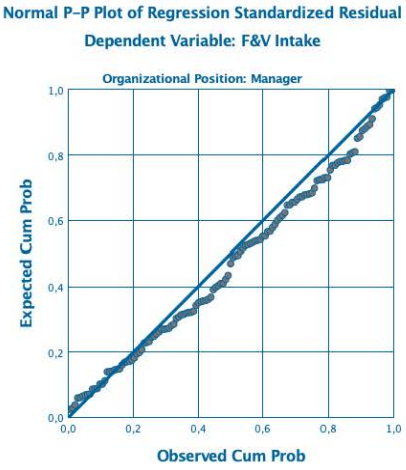
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,2253	2,5556	1,9410	,23797	131
Std. Predicted Value	-2,931	2,557	,022	,982	131
Standard Error of Predicted Value	,073	,237	,132	,033	131
Adjusted Predicted Value	1,1988	2,5060	1,9425	,23890	131
Residual	-1,27036	2,16952	-,04404	,61244	131
Std. Residual	-1,967	3,359	-,068	,948	131
Stud. Residual	-2,000	3,470	-,069	,973	131
Deleted Residual	-1,31341	2,31507	-,04558	,64475	131
Stud. Deleted Residual	-2,025	3,635	-,068	,983	131
Mahal. Distance	,690	16,514	4,803	2,874	131
Cook's Distance	,000	,135	,008	,017	131
Centered Leverage Value	,005	,127	,037	,022	131

a. Organizational Position = Manager

b. Dependent Variable: F&V Intake

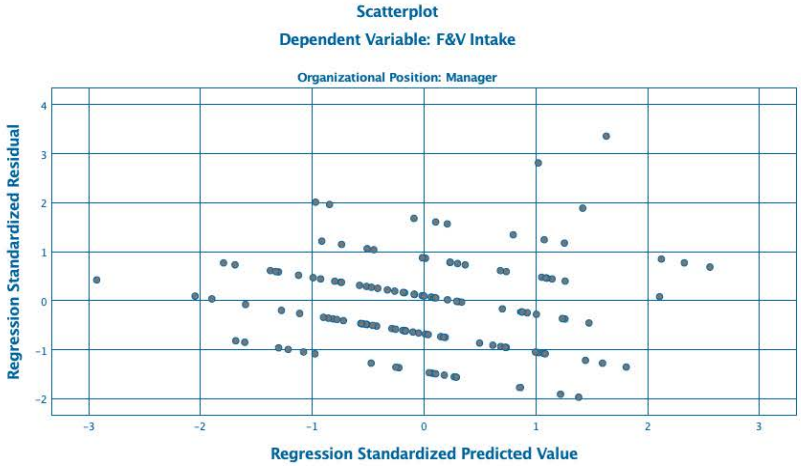
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



Organizational Position = Senior Manager

Organizational Position = Senior Manager - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	2,0098	,71757	51
Availability	2,8824	,98279	51
Accessibility	3,4388	,70440	49
Workplace Design	3,1224	,81350	49
Social Climate	2,4388	,62610	49
Communication	2,6633	,58084	49

a. Organizational Position = Senior Manager

Organizational Position = Senior Manager

Organizational Position = Senior Manager - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,087	-,018	,259	,014	,263
	Availability	,087	1,000	,277	,399	,220	,460
	Accessibility	-,018	,277	1,000	-,059	,168	,305
	Workplace Design	,259	,399	-,059	1,000	,168	,287
	Social Climate	,014	,220	,168	,168	1,000	,257
	Communication	,263	,460	,305	,287	,257	1,000
Sig. (1-tailed)	F&V Intake	.	,272	,452	,036	,461	,034
	Availability	,272	.	,027	,002	,064	,000
	Accessibility	,452	,027	.	,343	,124	,017
	Workplace Design	,036	,002	,343	.	,124	,023
	Social Climate	,461	,064	,124	,124	.	,037
	Communication	,034	,000	,017	,023	,037	.
N	F&V Intake	51	51	49	49	49	49
	Availability	51	51	49	49	49	49
	Accessibility	49	49	49	49	49	49
	Workplace Design	49	49	49	49	49	49
	Social Climate	49	49	49	49	49	49
	Communication	49	49	49	49	49	49

a. Organizational Position = Senior Manager

Organizational Position = Senior Manager

Organizational Position = Senior Manager - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Social Climate, Workplace Design, Accessibility, Availability[c]	.	Enter

a. Organizational Position = Senior Manager

b. Dependent Variable: F&V Intake

c. All requested variables entered.

Organizational Position = Senior Manager

Organizational Position = Senior Manager - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,351[b]	,123	,021	,71001

a. Organizational Position = Senior Manager

b. Predictors: (Constant), Communication, Social Climate, Workplace Design, Accessibility, Availability

c. Dependent Variable: F&V Intake

Organizational Position = Senior Manager

Organizational Position = Senior Manager - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,038	5	,608	1,205	,323[c]
	Residual	21,677	43	,504		
	Total	24,715	48			

a. Organizational Position = Senior Manager

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Social Climate, Workplace Design, Accessibility, Availability

Organizational Position = Senior Manager

Organizational Position = Senior Manager - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1,039	,735		1,415	,164	-,442	2,521					
	Availability	-,076	,127	-,104	-,597	,554	-,333	,181	,087	-,091	-,085	,672	1,489
	Accessibility	-,050	,160	-,049	-,311	,757	-,372	,272	-,018	-,047	-,044	,830	1,205
	Workplace Design	,202	,143	,229	1,417	,164	-,086	,490	,259	,211	,202	,779	1,284
	Social Climate	-,074	,172	-,064	-,429	,670	-,420	,273	,014	-,065	-,061	,907	1,102
	Communication	,341	,209	,275	1,635	,109	-,079	,762	,263	,242	,234	,715	1,397

a. Organizational Position = Senior Manager

b. Dependent Variable: F&V Intake

Organizational Position = Senior Manager

Organizational Position = Senior Manager - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,793	1,000	,00	,00	,00	,00	,00	,00
	2	,072	8,966	,02	,57	,04	,04	,15	,00
	3	,053	10,495	,00	,16	,15	,57	,02	,01
	4	,043	11,624	,03	,13	,10	,06	,79	,03
	5	,026	14,876	,01	,05	,21	,06	,00	,93
	6	,014	20,573	,94	,09	,50	,28	,04	,03

a. Organizational Position = Senior Manager

b. Dependent Variable: F&V Intake

Organizational Position = Senior Manager

Organizational Position = Senior Manager - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

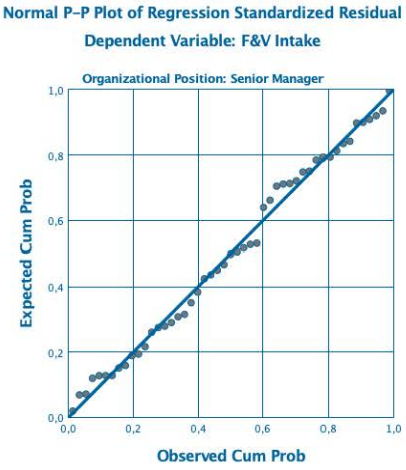
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,2720	2,6180	2,0109	,25130	49
Std. Predicted Value	-2,933	2,417	,005	,999	49
Standard Error of Predicted Value	,138	,377	,243	,056	49
Adjusted Predicted Value	1,2624	2,7078	2,0108	,26991	49
Residual	-1,46828	1,96078	,00946	,68316	49
Std. Residual	-2,068	2,762	,013	,962	49
Stud. Residual	-2,230	2,877	,013	1,027	49
Deleted Residual	-1,70779	2,12755	,00957	,78005	49
Stud. Deleted Residual	-2,344	3,164	,017	1,055	49
Mahal. Distance	,823	12,584	4,931	2,594	49
Cook's Distance	,000	,135	,025	,032	49
Centered Leverage Value	,017	,262	,103	,054	49

a. Organizational Position = Senior Manager

b. Dependent Variable: F&V Intake

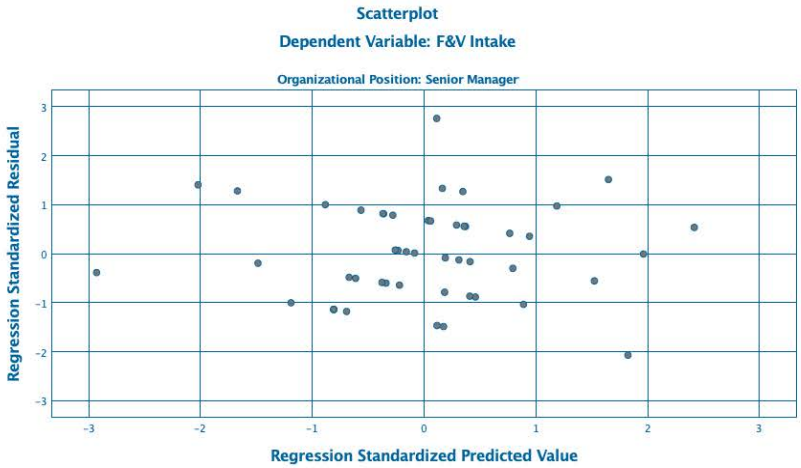
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



Organizational Position = Executive Manager

Organizational Position = Executive Manager - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	2,0476	,74001	21
Availability	2,7143	,96917	21
Accessibility	3,8500	,79837	20
Workplace Design	2,6250	,88667	20
Social Climate	2,3750	,70478	20
Communication	2,4750	,67814	20

a. Organizational Position = Executive Manager

Organizational Position = Executive Manager

Organizational Position = Executive Manager - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,124	,241	,421	,393	-,022
	Availability	,124	1,000	,090	,269	,263	,673
	Accessibility	,241	,090	1,000	-,084	-,059	,334
	Workplace Design	,421	,269	-,084	1,000	,363	,443
	Social Climate	,393	,263	-,059	,363	1,000	,131
	Communication	-,022	,673	,334	,443	,131	1,000
Sig. (1-tailed)	F&V Intake	.	,295	,153	,032	,043	,463
	Availability	,295	.	,353	,125	,131	,001
	Accessibility	,153	,353	.	,363	,403	,075
	Workplace Design	,032	,125	,363	.	,058	,025
	Social Climate	,043	,131	,403	,058	.	,291
	Communication	,463	,001	,075	,025	,291	.
N	F&V Intake	21	21	20	20	20	20
	Availability	21	21	20	20	20	20
	Accessibility	20	20	20	20	20	20
	Workplace Design	20	20	20	20	20	20
	Social Climate	20	20	20	20	20	20
	Communication	20	20	20	20	20	20

a. Organizational Position = Executive Manager

Organizational Position = Executive Manager

Organizational Position = Executive Manager - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Social Climate, Accessibility, Workplace Design, Availability[c]	.	Enter

a. Organizational Position = Executive Manager

b. Dependent Variable: F&V Intake

c. All requested variables entered.

Organizational Position = Executive Manager

Organizational Position = Executive Manager - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,725[b]	,525	,356	,59386

a. Organizational Position = Executive Manager

b. Predictors: (Constant), Communication, Social Climate, Accessibility, Workplace Design, Availability

c. Dependent Variable: F&V Intake

Organizational Position = Executive Manager

Organizational Position = Executive Manager - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,467	5	1,093	3,101	,043[c]
	Residual	4,937	14	,353		
	Total	10,405	19			

a. Organizational Position = Executive Manager

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Social Climate, Accessibility, Workplace Design, Availability

Organizational Position = Executive Manager

Organizational Position = Executive Manager - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-,416	,900		-,462	,651	-2,345	1,514					
	Availability	,267	,202	,350	1,322	,208	-,167	,702	,124	,333	,243	,482	2,073
	Accessibility	,481	,193	,518	2,488	,026	,066	,895	,241	,554	,458	,783	1,277
	Workplace Design	,519	,192	,622	2,702	,017	,107	,931	,421	,585	,497	,639	1,565
	Social Climate	,211	,216	,201	,977	,345	-,252	,674	,393	,253	,180	,802	1,247
	Communication	-,799	,333	-,732	-2,399	,031	-1,514	-,085	-,022	-,540	-,442	,364	2,751

a. Organizational Position = Executive Manager

b. Dependent Variable: F&V Intake

Organizational Position = Executive Manager

Organizational Position = Executive Manager - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,741	1,000	,00	,00	,00	,00	,00	,00
	2	,087	8,104	,00	,22	,00	,16	,18	,03
	3	,080	8,448	,04	,11	,17	,19	,00	,00
	4	,059	9,841	,00	,10	,02	,31	,50	,03
	5	,019	17,353	,41	,29	,03	,07	,32	,50
	6	,013	21,151	,55	,27	,78	,27	,00	,43

a. Organizational Position = Executive Manager

b. Dependent Variable: F&V Intake

Organizational Position = Executive Manager

Organizational Position = Executive Manager - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

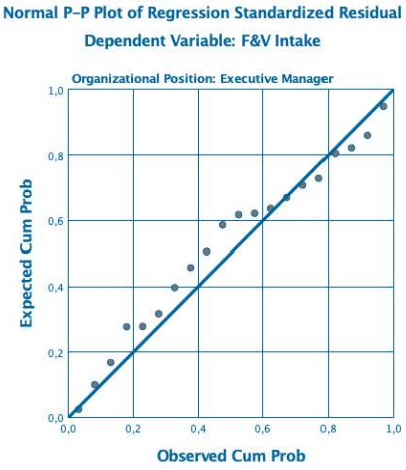
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	,7928	2,8704	2,0438	,53752	20
Std. Predicted Value	-2,339	1,534	-,007	1,002	20
Standard Error of Predicted Value	,206	,478	,321	,063	20
Adjusted Predicted Value	,6833	2,8100	1,9983	,54563	20
Residual	-1,16805	,96947	,03120	,51016	20
Std. Residual	-1,967	1,632	,053	,859	20
Stud. Residual	-2,307	1,787	,082	1,017	20
Deleted Residual	-1,60647	1,18129	,07671	,72558	20
Stud. Deleted Residual	-2,823	1,960	,063	1,108	20
Mahal. Distance	1,337	11,355	4,796	2,319	20
Cook's Distance	,000	,333	,074	,095	20
Centered Leverage Value	,070	,598	,252	,122	20

a. Organizational Position = Executive Manager

b. Dependent Variable: F&V Intake

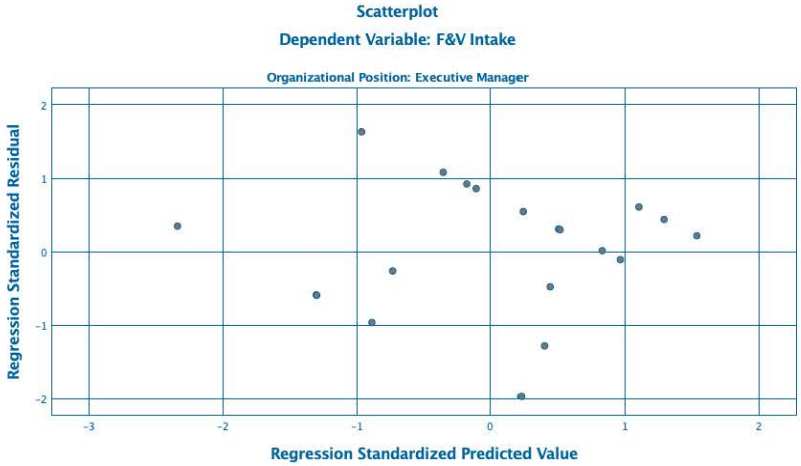
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	1,7273	,46710	11
Availability	2,6364	1,22660	11
Accessibility	3,1818	,87386	11
Workplace Design	2,1364	,59544	11
Social Climate	2,0000	,62361	10
Communication	2,0000	,62361	10

a. Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,246	-,111	,327	,458	,092
	Availability	,246	1,000	,021	,622	,105	,245
	Accessibility	-,111	,021	1,000	-,245	-,097	-,291
	Workplace Design	,327	,622	-,245	1,000	,498	,783
	Social Climate	,458	,105	-,097	,498	1,000	,429
	Communication	,092	,245	-,291	,783	,429	1,000
Sig. (1-tailed)	F&V Intake	.	,233	,372	,163	,091	,401
	Availability	,233	.	,475	,020	,387	,248
	Accessibility	,372	,475	.	,234	,395	,207
	Workplace Design	,163	,020	,234	.	,071	,004
	Social Climate	,091	,387	,395	,071	.	,108
	Communication	,401	,248	,207	,004	,108	.
N	F&V Intake	11	11	11	11	10	10
	Availability	11	11	11	11	10	10
	Accessibility	11	11	11	11	10	10
	Workplace Design	11	11	11	11	10	10
	Social Climate	10	10	10	10	10	10
	Communication	10	10	10	10	10	10

a. Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Availability, Accessibility, Social Climate, Workplace Design[c]	.	Enter

a. Organizational Position = Owner, Board Member or similar

b. Dependent Variable: F&V Intake

c. All requested variables entered.

Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,563[b]	,317	-,537	,57912

a. Organizational Position = Owner, Board Member or similar

b. Predictors: (Constant), Communication, Availability, Accessibility, Social Climate, Workplace Design

c. Dependent Variable: F&V Intake

Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,622	5	,124	,371	,847[c]
	Residual	1,342	4	,335		
	Total	1,964	9			

a. Organizational Position = Owner, Board Member or similar

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Availability, Accessibility, Social Climate, Workplace Design

Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1,198	1,213		,988	,379	-2,170	4,566					
	Availability	,025	,248	,066	,102	,924	-,664	,715	,246	,051	,042	,401	2,492
	Accessibility	-,056	,236	-,105	-,239	,823	-,710	,598	-,111	-,118	-,099	,879	1,138
	Workplace Design	,311	,830	,397	,375	,727	-1,993	2,615	,327	,184	,155	,153	6,550
	Social Climate	,328	,378	,438	,867	,435	-,722	1,378	,458	,398	,358	,670	1,493
	Communication	-,340	,577	-,453	-,588	,588	-1,942	1,263	,092	-,282	-,243	,288	3,476

a. Organizational Position = Owner, Board Member or similar

b. Dependent Variable: F&V Intake

Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,684	1,000	,00	,00	,00	,00	,00	,00
	2	,135	6,497	,01	,28	,10	,00	,02	,00
	3	,113	7,094	,00	,10	,18	,01	,07	,05
	4	,045	11,271	,01	,05	,01	,00	,73	,16
	5	,017	18,276	,96	,00	,67	,00	,03	,09
	6	,007	28,357	,01	,57	,03	,98	,15	,59

a. Organizational Position = Owner, Board Member or similar

b. Dependent Variable: F&V Intake

Organizational Position = Owner, Board Member or similar

Organizational Position = Owner, Board Member or similar - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

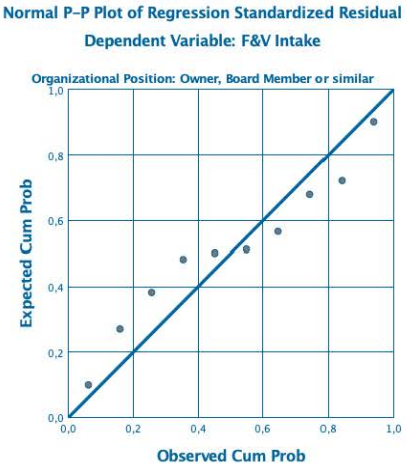
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,3542	2,1737	1,7321	,26984	10
Std. Predicted Value	-1,419	1,696	,018	1,026	10
Standard Error of Predicted Value	,360	,539	,457	,055	10
Adjusted Predicted Value	,4591	3,1097	1,6974	,83445	10
Residual	-,74466	,74798	,01790	,40364	10
Std. Residual	-1,286	1,292	,031	,697	10
Stud. Residual	-1,963	2,133	,054	1,138	10
Deleted Residual	-1,73514	2,04093	,05260	1,11470	10
Stud. Deleted Residual	-8,854	,832	-,953	3,027	9
Mahal. Distance	2,582	6,904	4,785	1,334	10
Cook's Distance	,000	1,311	,362	,427	10
Centered Leverage Value	,287	,767	,532	,148	10

a. Organizational Position = Owner, Board Member or similar

b. Dependent Variable: F&V Intake

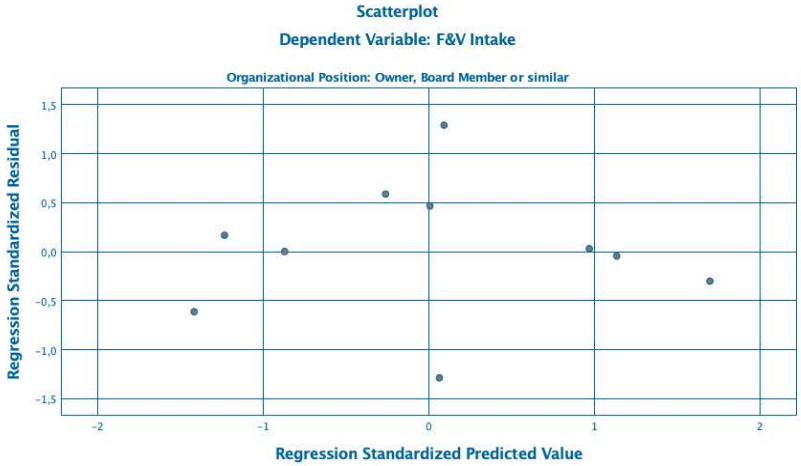
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	2,2368	,82972	57
Availability	3,1786	,83899	56
Accessibility	3,4545	,64026	55
Workplace Design	3,2636	,75065	55
Social Climate	2,5833	,76940	54
Communication	3,0000	,60447	53

a. Organizational Position = Other white-collar job

Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,173	,118	,315	,298	,241
	Availability	,173	1,000	,059	,293	,137	,471
	Accessibility	,118	,059	1,000	,324	,226	,000
	Workplace Design	,315	,293	,324	1,000	,106	,089
	Social Climate	,298	,137	,226	,106	1,000	,297
	Communication	,241	,471	,000	,089	,297	1,000
Sig. (1-tailed)	F&V Intake	.	,101	,195	,010	,014	,041
	Availability	,101	.	,333	,015	,161	,000
	Accessibility	,195	,333	.	,008	,050	,500
	Workplace Design	,010	,015	,008	.	,222	,264
	Social Climate	,014	,161	,050	,222	.	,015
	Communication	,041	,000	,500	,264	,015	.
N	F&V Intake	57	56	55	55	54	53
	Availability	56	56	55	55	54	53
	Accessibility	55	55	55	55	54	53
	Workplace Design	55	55	55	55	54	53
	Social Climate	54	54	54	54	54	53
	Communication	53	53	53	53	53	53

a. Organizational Position = Other white-collar job

Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Accessibility, Workplace Design, Social Climate, Availability[c]	.	Enter

a. Organizational Position = Other white-collar job

b. Dependent Variable: F&V Intake

c. All requested variables entered.

Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,437[b]	,191	,105	,78495

a. Organizational Position = Other white-collar job

b. Predictors: (Constant), Communication, Accessibility, Workplace Design, Social Climate, Availability

c. Dependent Variable: F&V Intake

Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6,840	5	1,368	2,220	,068[c]
	Residual	28,959	47	,616		
	Total	35,799	52			

a. Organizational Position = Other white-collar job

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Accessibility, Workplace Design, Social Climate, Availability

Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	,080	,850		,095	,925	-1,629	1,790					
	Availability	-,014	,154	-,014	-,092	,927	-,323	,295	,173	-,013	-,012	,714	1,401
	Accessibility	-,034	,184	-,026	-,184	,855	-,405	,337	,118	-,027	-,024	,850	1,177
	Workplace Design	,320	,160	,290	1,996	,052	-,002	,643	,315	,280	,262	,818	1,223
	Social Climate	,247	,153	,229	1,618	,112	-,060	,554	,298	,230	,212	,860	1,162
	Communication	,212	,213	,154	,995	,325	-,215	,641	,241	,144	,131	,715	1,399

a. Organizational Position = Other white-collar job

b. Dependent Variable: F&V Intake

Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,814	1,000	,00	,00	,00	,00	,00	,00
	2	,067	9,288	,00	,14	,00	,05	,72	,00
	3	,054	10,398	,01	,27	,13	,17	,03	,08
	4	,031	13,714	,07	,14	,12	,42	,23	,18
	5	,023	15,994	,00	,45	,34	,32	,01	,37
	6	,012	22,355	,92	,01	,41	,03	,01	,36

a. Organizational Position = Other white-collar job

b. Dependent Variable: F&V Intake

Organizational Position = Other white-collar job

Organizational Position = Other white-collar job - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

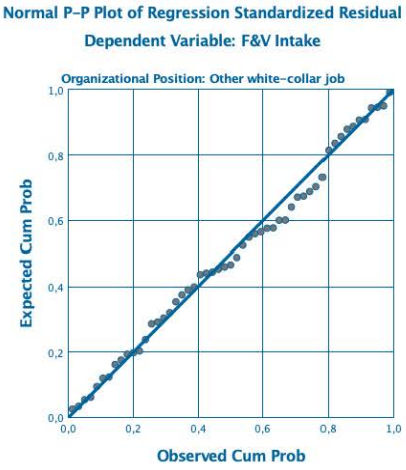
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,6144	3,2510	2,2313	,35753	53
Std. Predicted Value	-1,716	2,796	-,015	,986	53
Standard Error of Predicted Value	,132	,453	,253	,070	53
Adjusted Predicted Value	1,5734	3,0149	2,2293	,35433	53
Residual	-1,53496	1,88577	-,00486	,74839	53
Std. Residual	-1,956	2,402	-,006	,953	53
Stud. Residual	-2,020	2,580	-,005	1,015	53
Deleted Residual	-1,63796	2,17525	-,00284	,85012	53
Stud. Deleted Residual	-2,091	2,755	-,002	1,036	53
Mahal. Distance	,495	16,325	4,834	3,378	53
Cook's Distance	,000	,170	,023	,037	53
Centered Leverage Value	,010	,314	,093	,065	53

a. Organizational Position = Other white-collar job

b. Dependent Variable: F&V Intake

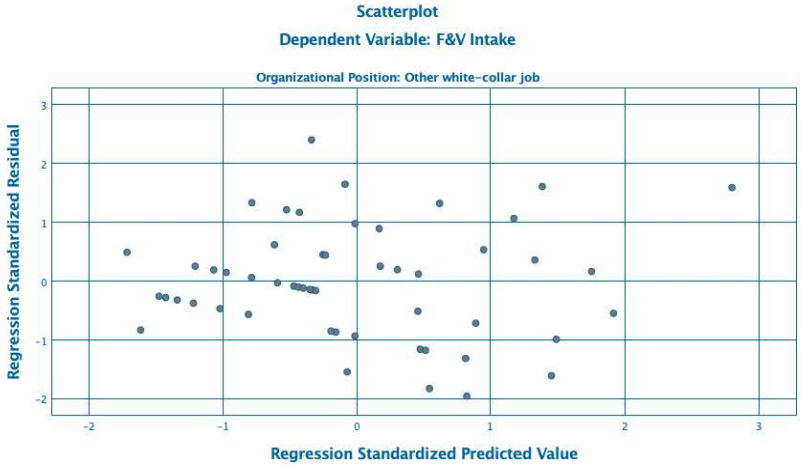
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



Log

Log - Log - January 25, 2020

```
SAVE OUTFILE="/Users/christianklein/OneDrive - University of Worcester/Christian's "+
    "Research/Christian's DBA Thesis/Chapters/03_Research Methodology/Survey/Data & "+
    "Analyzes/12.05.2019/20190915/Data set 20200125.sav"
  /COMPRESSED.
```

Appendix 12 - Standard Multiple Regression Grouped Hierarchy Positions

IBM SPSS Web Report - Standard multiple regression_org position grouped.spv

Log

Log - Log - January 25, 2020

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING PAIRWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT FVI
  /METHOD=ENTER AVA ACE WOP SOC COM
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression

Regression - Warnings - January 25, 2020

Warnings

There are no valid cases in split file OrgPo_grouped=. for models with dependent variable F&V Intake. Statistics cannot be computed.

No valid cases found in split file OrgPo_grouped=.. Equation-building skipped.

OrgPo_grouped = .

OrgPo_grouped = . - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	,0000	.	0
Availability	,0000	.	0
Accessibility	,0000	.	0
Workplace Design	,0000	.	0
Social Climate	,0000	.	0
Communication	,0000	.	0

a. OrgPo_grouped = .

OrgPo_grouped = .

OrgPo_grouped = . - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	.	.	.	.	.
	Availability	.	1,000	.	.	.	.
	Accessibility	.	.	1,000	.	.	.
	Workplace Design	.	.	.	1,000	.	.
	Social Climate	.	.	.	.	1,000	.
	Communication	.	.	.	.	.	1,000
Sig. (1-tailed)	F&V Intake	.	.	.	.	.	.
	Availability	.	.	.	.	.	.
	Accessibility	.	.	.	.	.	.
	Workplace Design	.	.	.	.	.	.
	Social Climate	.	.	.	.	.	.
	Communication	.	.	.	.	.	.
N	F&V Intake	0	0	0	0	0	0
	Availability	0	0	0	0	0	0
	Accessibility	0	0	0	0	0	0
	Workplace Design	0	0	0	0	0	0
	Social Climate	0	0	0	0	0	0
	Communication	0	0	0	0	0	0

a. OrgPo_grouped = .

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	1,8261	,65240	115
Availability	3,0478	,97552	115
Accessibility	3,3795	,79765	112
Workplace Design	3,0893	,70460	112
Social Climate	2,5357	,82940	112
Communication	2,7928	,67241	111

a. OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,158	-,169	,198	,213	,134
	Availability	,158	1,000	,359	,211	,114	,324
	Accessibility	-,169	,359	1,000	,087	-,068	,202
	Workplace Design	,198	,211	,087	1,000	,095	,449
	Social Climate	,213	,114	-,068	,095	1,000	,076
	Communication	,134	,324	,202	,449	,076	1,000
Sig. (1-tailed)	F&V Intake	.	,046	,038	,018	,012	,080
	Availability	,046	.	,000	,013	,116	,000
	Accessibility	,038	,000	.	,180	,237	,017
	Workplace Design	,018	,013	,180	.	,160	,000
	Social Climate	,012	,116	,237	,160	.	,214
	Communication	,080	,000	,017	,000	,214	.
N	F&V Intake	115	115	112	112	112	111
	Availability	115	115	112	112	112	111
	Accessibility	112	112	112	112	112	111
	Workplace Design	112	112	112	112	112	111
	Social Climate	112	112	112	112	112	111
	Communication	111	111	111	111	111	111

a. OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Social Climate, Accessibility, Workplace Design, Availability[c]	.	Enter

a. OrgPo_grouped = Administraive staff

b. Dependent Variable: F&V Intake

c. All requested variables entered.

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,373[b]	,139	,098	,51963

a. OrgPo_grouped = Administraive staff

b. Predictors: (Constant), Communication, Social Climate, Accessibility, Workplace Design, Availability

c. Dependent Variable: F&V Intake

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6,506	5	1,301	3,389	,007[c]
	Residual	40,313	105	,384		
	Total	46,819	110			

a. OrgPo_grouped = Administraive staff

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Social Climate, Accessibility, Workplace Design, Availability

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1,274	,403		3,159	,002	,474	2,074					
	Availability	,122	,068	,182	1,783	,077	-,014	,257	,158	,171	,161	,787	1,270
	Accessibility	-,201	,080	-,245	-2,497	,014	-,360	-,041	-,169	-,237	-,225	,850	1,177
	Workplace Design	,134	,094	,145	1,426	,157	-,053	,321	,198	,138	,129	,790	1,265
	Social Climate	,124	,072	,158	1,719	,089	-,019	,268	,213	,165	,156	,967	1,034
	Communication	,046	,102	,047	,448	,655	-,157	,249	,134	,044	,041	,735	1,360

a. OrgPo_grouped = Administraive staff

b. Dependent Variable: F&V Intake

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,752	1,000	,00	,00	,00	,00	,00	,00
	2	,094	7,818	,00	,10	,05	,00	,74	,01
	3	,063	9,564	,01	,63	,00	,14	,08	,08
	4	,047	11,115	,02	,23	,56	,08	,00	,09
	5	,028	14,278	,01	,03	,00	,55	,02	,80
	6	,016	18,779	,95	,01	,38	,22	,16	,01

a. OrgPo_grouped = Administraive staff

b. Dependent Variable: F&V Intake

OrgPo_grouped = Administraive staff

OrgPo_grouped = Administraive staff - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

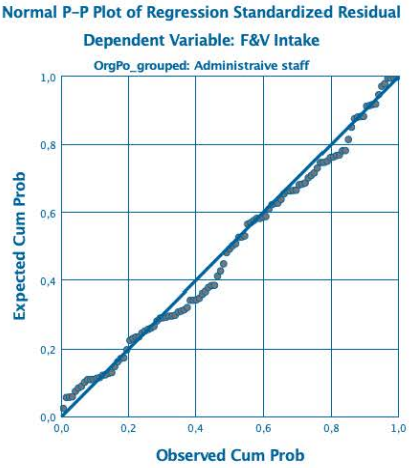
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,2393	2,5442	1,8248	,24372	111
Std. Predicted Value	-2,413	2,953	-,005	1,002	111
Standard Error of Predicted Value	,065	,255	,139	,040	111
Adjusted Predicted Value	1,2185	2,4907	1,8211	,24549	111
Residual	-1,21808	1,84728	,00402	,61270	111
Std. Residual	-1,966	2,981	,006	,989	111
Stud. Residual	-2,038	3,271	,009	1,024	111
Deleted Residual	-1,30976	2,22376	,00769	,65763	111
Stud. Deleted Residual	-2,070	3,435	,013	1,038	111
Mahal. Distance	,221	17,632	4,978	3,479	111
Cook's Distance	,000	,363	,013	,039	111
Centered Leverage Value	,002	,160	,045	,032	111

a. OrgPo_grouped = Administraive staff

b. Dependent Variable: F&V Intake

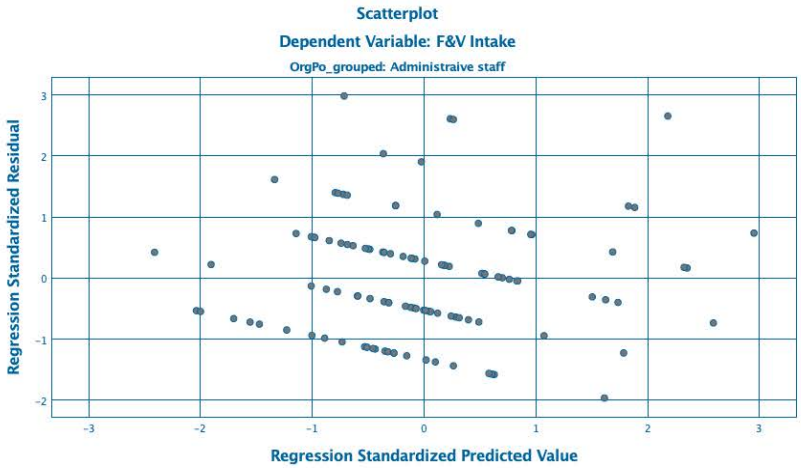
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



OrgPo_grouped = Manager

OrgPo_grouped = Manager - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	1,9529	,68364	223
Availability	3,0541	1,01092	222
Accessibility	3,4078	,79686	217
Workplace Design	3,0302	,83457	215
Social Climate	2,3991	,70235	213
Communication	2,7405	,68163	210

a. OrgPo_grouped = Manager

OrgPo_grouped = Manager

OrgPo_grouped = Manager - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,155	,130	,291	,203	,122
	Availability	,155	1,000	,273	,371	,135	,486
	Accessibility	,130	,273	1,000	,117	,064	,071
	Workplace Design	,291	,371	,117	1,000	,256	,445
	Social Climate	,203	,135	,064	,256	1,000	,185
	Communication	,122	,486	,071	,445	,185	1,000
Sig. (1-tailed)	F&V Intake	.	,011	,028	,000	,001	,038
	Availability	,011	.	,000	,000	,025	,000
	Accessibility	,028	,000	.	,043	,177	,154
	Workplace Design	,000	,000	,043	.	,000	,000
	Social Climate	,001	,025	,177	,000	.	,004
	Communication	,038	,000	,154	,000	,004	.
N	F&V Intake	223	222	217	215	213	210
	Availability	222	222	217	215	213	210
	Accessibility	217	217	217	215	213	210
	Workplace Design	215	215	215	215	213	210
	Social Climate	213	213	213	213	213	210
	Communication	210	210	210	210	210	210

a. OrgPo_grouped = Manager

OrgPo_grouped = Manager

OrgPo_grouped = Manager - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Accessibility, Social Climate, Workplace Design, Availability[c]	.	Enter

a. OrgPo_grouped = Manager

b. Dependent Variable: F&V Intake

c. All requested variables entered.

OrgPo_grouped = Manager

OrgPo_grouped = Manager - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,335[b]	,112	,091	,65194

a. OrgPo_grouped = Manager

b. Predictors: (Constant), Communication, Accessibility, Social Climate, Workplace Design, Availability

c. Dependent Variable: F&V Intake

OrgPo_grouped = Manager

OrgPo_grouped = Manager - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10,973	5	2,195	5,164	,000[c]
	Residual	86,706	204	,425		
	Total	97,680	209			

a. OrgPo_grouped = Manager

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Accessibility, Social Climate, Workplace Design, Availability

OrgPo_grouped = Manager

OrgPo_grouped = Manager - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	,796	,289		2,758	,006	,227	1,366					
	Availability	,027	,054	,040	,500	,618	-,079	,133	,155	,035	,033	,684	1,462
	Accessibility	,072	,059	,084	1,222	,223	-,044	,189	,130	,085	,081	,918	1,090
	Workplace Design	,204	,063	,249	3,250	,001	,080	,328	,291	,222	,214	,742	1,348
	Social Climate	,132	,067	,136	1,979	,049	,001	,263	,203	,137	,131	,927	1,079
	Communication	-,039	,081	-,039	-,483	,630	-,198	,120	,122	-,034	-,032	,674	1,484

a. OrgPo_grouped = Manager

b. Dependent Variable: F&V Intake

OrgPo_grouped = Manager

OrgPo_grouped = Manager - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,759	1,000	,00	,00	,00	,00	,00	,00
	2	,080	8,495	,01	,36	,00	,00	,46	,02
	3	,061	9,735	,02	,01	,49	,14	,08	,05
	4	,048	10,958	,01	,46	,01	,40	,36	,02
	5	,034	12,922	,04	,11	,02	,45	,01	,64
	6	,018	18,067	,91	,06	,47	,01	,08	,27

a. OrgPo_grouped = Manager

b. Dependent Variable: F&V Intake

OrgPo_grouped = Manager

OrgPo_grouped = Manager - Casewise Diagnostics - January 25, 2020

Casewise Diagnostics[a,b]

Case Number	Std. Residual	F&V Intake	Predicted Value	Residual
219	3,291	4,50	2,3541	2,14586

a. OrgPo_grouped = Manager

b. Dependent Variable: F&V Intake

OrgPo_grouped = Manager

OrgPo_grouped = Manager - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

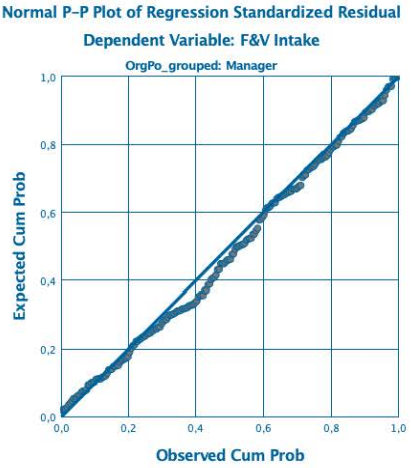
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,3114	2,5524	1,9572	,22697	210
Std. Predicted Value	-2,800	2,616	,019	,991	210
Standard Error of Predicted Value	,054	,194	,106	,026	210
Adjusted Predicted Value	1,3015	2,5212	1,9573	,22702	210
Residual	-1,33317	2,14586	-,02145	,63623	210
Std. Residual	-2,045	3,291	-,033	,976	210
Stud. Residual	-2,077	3,361	-,033	,991	210
Deleted Residual	-1,37576	2,23791	-,02164	,65622	210
Stud. Deleted Residual	-2,094	3,450	-,032	,996	210
Mahal. Distance	,463	17,501	4,910	2,916	210
Cook's Distance	,000	,081	,005	,009	210
Centered Leverage Value	,002	,084	,023	,014	210

a. OrgPo_grouped = Manager

b. Dependent Variable: F&V Intake

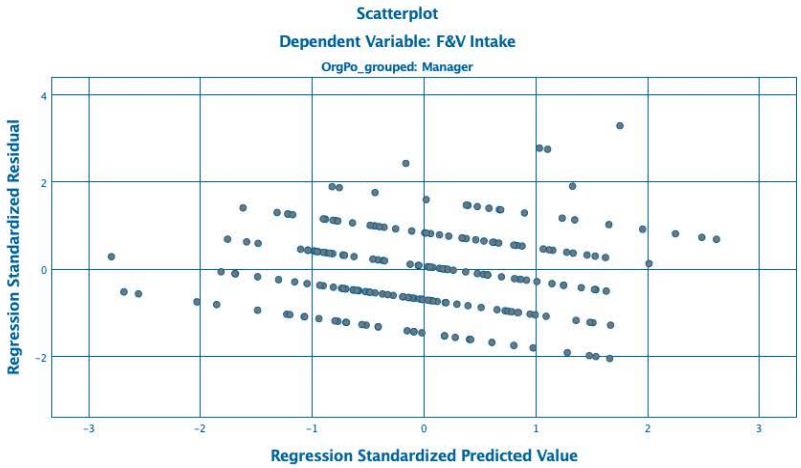
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - Descriptive Statistics - January 25, 2020

Descriptive Statistics[a]

	Mean	Std. Deviation	N
F&V Intake	2,2368	,82972	57
Availability	3,1786	,83899	56
Accessibility	3,4545	,64026	55
Workplace Design	3,2636	,75065	55
Social Climate	2,5833	,76940	54
Communication	3,0000	,60447	53

a. OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - Correlations - January 25, 2020

Correlations[a]

		F&V Intake	Availability	Accessibility	Workplace Design	Social Climate	Communication
Pearson Correlation	F&V Intake	1,000	,173	,118	,315	,298	,241
	Availability	,173	1,000	,059	,293	,137	,471
	Accessibility	,118	,059	1,000	,324	,226	,000
	Workplace Design	,315	,293	,324	1,000	,106	,089
	Social Climate	,298	,137	,226	,106	1,000	,297
	Communication	,241	,471	,000	,089	,297	1,000
Sig. (1-tailed)	F&V Intake	.	,101	,195	,010	,014	,041
	Availability	,101	.	,333	,015	,161	,000
	Accessibility	,195	,333	.	,008	,050	,500
	Workplace Design	,010	,015	,008	.	,222	,264
	Social Climate	,014	,161	,050	,222	.	,015
	Communication	,041	,000	,500	,264	,015	.
N	F&V Intake	57	56	55	55	54	53
	Availability	56	56	55	55	54	53
	Accessibility	55	55	55	55	54	53
	Workplace Design	55	55	55	55	54	53
	Social Climate	54	54	54	54	54	53
	Communication	53	53	53	53	53	53

a. OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - Variables Entered/Removed - January 25, 2020

Variables Entered/Removed[a,b]

Model	Variables Entered	Variables Removed	Method
1	Communication, Accessibility, Workplace Design, Social Climate, Availability[c]	.	Enter

a. OrgPo_grouped = Other white-collar job

b. Dependent Variable: F&V Intake

c. All requested variables entered.

OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - Model Summary - January 25, 2020

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,437[b]	,191	,105	,78495

a. OrgPo_grouped = Other white-collar job

b. Predictors: (Constant), Communication, Accessibility, Workplace Design, Social Climate, Availability

c. Dependent Variable: F&V Intake

OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - ANOVA - January 25, 2020

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,840	5	1,168	2,220	,068[c]
	Residual	28,959	47	,616		
	Total	35,799	52			

a. OrgPo_grouped = Other white-collar job

b. Dependent Variable: F&V Intake

c. Predictors: (Constant), Communication, Accessibility, Workplace Design, Social Climate, Availability

OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - Coefficients - January 25, 2020

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	,080	,850		,095	,925	-1,629	1,790					
	Availability	-,014	,154	-,014	-,092	,927	-,323	,295	,173	-,013	-,012	,714	1,401
	Accessibility	-,034	,184	-,025	-,184	,855	-,405	,337	,118	-,027	-,024	,850	1,177
	Workplace Design	,320	,160	,290	1,995	,052	-,002	,643	,315	,280	,262	,818	1,223
	Social Climate	,247	,153	,229	1,618	,112	-,060	,554	,298	,230	,212	,860	1,162
	Communication	,212	,213	,154	,995	,325	-,216	,641	,241	,144	,131	,715	1,399

a. OrgPo_grouped = Other white-collar job

b. Dependent Variable: F&V Intake

OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - Collinearity Diagnostics - January 25, 2020

Collinearity Diagnostics[a,b]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Availability	Accessibility	Workplace Design	Social Climate	Communication
1	1	5,814	1,000	,00	,00	,00	,00	,00	,00
	2	,067	9,288	,00	,14	,00	,05	,72	,00
	3	,054	10,398	,01	,27	,13	,17	,03	,08
	4	,031	13,714	,07	,14	,12	,42	,23	,18
	5	,023	15,994	,00	,45	,34	,32	,01	,37
	6	,012	22,355	,92	,01	,41	,03	,01	,36

a. OrgPo_grouped = Other white-collar job

b. Dependent Variable: F&V Intake

OrgPo_grouped = Other white-collar job

OrgPo_grouped = Other white-collar job - Residuals Statistics - January 25, 2020

Residuals Statistics[a,b]

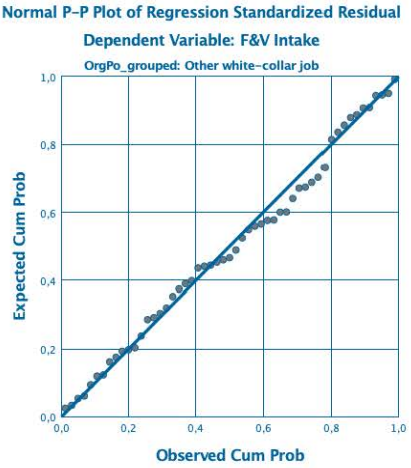
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,6144	3,2510	2,2313	,35753	53
Std. Predicted Value	-1,716	2,796	-,015	,986	53
Standard Error of Predicted Value	,132	,453	,253	,070	53
Adjusted Predicted Value	1,5734	3,0149	2,2293	,35433	53
Residual	-1,53496	1,88577	-,00486	,74839	53
Std. Residual	-1,956	2,402	-,006	,953	53
Stud. Residual	-2,020	2,580	-,005	1,015	53
Deleted Residual	-1,63796	2,17525	-,00284	,85012	53
Stud. Deleted Residual	-2,091	2,755	-,002	1,036	53
Mahal. Distance	,495	16,325	4,834	3,378	53
Cook's Distance	,000	,170	,023	,037	53
Centered Leverage Value	,010	,314	,093	,065	53

a. OrgPo_grouped = Other white-collar job

b. Dependent Variable: F&V Intake

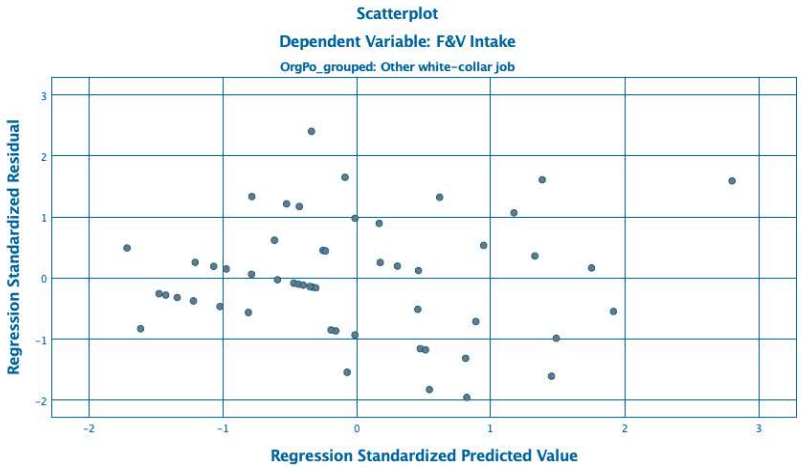
Charts

Charts - *zresid Normal P-P Plot - January 25, 2020



Charts

Charts - *zresid by *zpred Scatterplot - January 25, 2020



Appendix 13 - Qualitative Data Reporting

In total 452 participants joined the survey, which existed of 7 qualitative questions. The following diagram shows in which order the following tables must be.

D1	E1	F1
D2	E2	F2
D3	E3	F3
D4	E4	F4
D5	E5	F5
D6	E6	F6

_Antwort-ID	54. Gibt es an Ihrem Arbeitsplatz irgendwelche Hürden, die Sie daran hindern, Obst und Gemüse beider Arbeit zu essen?	Code 1	Code 2	55. Gibt es in Ihrem Arbeitsbereich irgendwelche Hürden, die Sie daran hindern, Obst und Gemüse beider Arbeit zu essen?	Code 1	Code 2	Code 3
54485529		no	no	Zu wenig Orte um Obst zu erhalten/ kaufen.	availability	no	no
54486348		no	no		no	no	no
54488260	Kein Hindernisse	no	no	Kein Hindernisse	no	no	no
54488832	Sauberkeit	hygienic conditions	no	Voller Kühlschrank.	Storing	no	no
54488945	Nein, mein Arbeitsplatz bietet genügend Platz für die Ablage von Arbeitsmitteln UND Obst/Gemüse.	no	no	Die Küche ist zur Zubereitung zu klein, bzw. es gibt zu wenig Platz zur Ablage.	Storing	no	no
54492439	Es wird kein Obst zu Verfügung gestellt.	Availability	no	Nein	Accessibility	Storing	no
54494032		no	no		no	no	no
54498935		no	no		no	no	no
54498989	Zeit	Time	no		no	no	no
54500995		no	no		no	no	no
54505591	Nein	no	no	Nein	no	no	no
54508652	Nein	no	no	Nein	no	no	no
54518834	Nein	no	no	Nein	no	no	no
54519762	Nein	no	no	Nein	no	no	no
54519933	Nur bei Obst/Gemüse, für das Besteck notwendig ist. ; Die Küche ist was das Besteck angeht nicht besonders gut ausgestattet noch hygienisch sauber	Accessibility	hygienic conditi	das Obst liegt zum Teil auf dem Tisch, dadurch wird man durch Telefonate etc. schnell abgelenkt oder schiebt den Konsum vor sich hin.	time	no	no
54537001	Unterlagen	Accessibility	no		no	no	no
54557037	Nein. Es wäre zoga reine Anlagefläche für Obst vorhanden.	no	no	Nein	no	no	no
54559624	Nein	no	no	Nein	no	no	no
54560012	nein	no	no	nein	no	no	no
54568397		no	no		no	no	no
54572453		no	no		no	no	no
54580879	Nein	no	no	Nein	no	no	no
54590006		no	no		no	no	no
54608621	Obst ist in Ordnung, aber wir können kein Gemüse kochen	Accessibility	no	Nein	no	no	no
54612991	Nein	no	no	Nein	no	no	no
54613023		no	no		no	no	no
54613189		no	no		no	no	no
54613432	Nein	no	no	Schlechte Küche	Accessibility	no	no
54613447		no	no		no	no	no
54613517		no	no		no	no	no
54613640		no	no		no	no	no
54613933		no	no		no	no	no
54613965		no	no		no	no	no
54615103	Nein	no	no	Nein	no	no	no
54615298		no	no		no	no	no
54617188		no	no		no	no	no
54629086		no	no	zu kleine Kühlschränke für Lagerung von Obst und Gemüse; keine ausreichende Küchenausstattung	Accessibility	Accessibility	Storing
54636639		no	no		no	no	no
54636690		no	no		no	no	no
54639582		no	no		no	no	no
54639702		no	no		no	no	no
54648005		no	no	Ausstattung der Küche	Accessibility	no	no
54649400	Schlechte Küche, Zubereitung muss am schreibtisch erfolgen	Accessibility	no	Nein	no	no	no
54650757	nein	no	no	nein	no	no	no
54675549	Nein	no	no	Nein	no	no	no
54682795	Platz auf dem Schreibtisch, evtl. klebrige Hände und Gefahr des kleckerns. ; Gemüse müsste tw. erst gekocht werden. Da zu fehlen Töpfe, Pfannen, Abluft, etc.; Die Zubereitungszeit geht von der Arbeits- oder Pausenzeit ab. Organisation der Versorgung meist am Vortag nötig (Einkauf des Gemüses). Es fehlt an Vielfalt bei Obst und Gemüse weil tw. Gemüse oder Obst für mehrere Tage reicht, es am zweiten Tag aber nicht mehr so gut schmeckt.	Accessibility	Availability	Der Platz im Kühlschrank ist limitiert durch die vielen Mitarbeiter und die Arbeitsfläche ist zu klein für die Vorbereitung (Schneiden, Hobeln, etc.) Die Hygiene im Kühlschrank spielt auch eine wesentliche Rolle und die Differenzierung - was ist Dein, was ist mein Gemüse?	Storing	hygienic conditions	no
54715257	nein	no	no	nein	no	no	no
54727057		no	no	Kein Schneidebrett / Biomülleimer	Accessibility	no	no
54760256	Nein	no	no	Nein	no	no	no
54795596		no	no		no	no	no
54807427		no	no		no	no	no
54835275	Nein	no	no	Nein	no	no	no
54835839	nein	no	no	nein	no	no	no
54835510	Nein	no	no	Nein	no	no	no
54843856	Nein	no	no	Nein	no	no	no
54850077		no	no		no	no	no
54850082	Nein	no	no	Nein	no	no	no
54863277		no	no		no	no	no
54870356	nein	no	no	nein	no	no	no
54884061		no	no		no	no	no
54885947	Nein	no	no	Nein	no	no	no
54887023		no	no		no	no	no
54893998	Nein	no	no	Nein	no	no	no
54896930	Nein	no	no	Nein	no	no	no
54897122	Nein	no	no	Nein	no	no	no
54899573	Nein	no	no	Nein	no	no	no
54909229	Nein	no	no	Keine scharfen Messer, keine Schneidebretter in der Küche vorhanden	Accessibility	no	no
54912211		no	no	Fehlende Messer; ; Leider keine hygienische Küche	Accessibility	no	no
54925056	Nein, gibt es nicht.	no	no	Aktuell haben wir im Büro keine Küche, sodass mitgebrachtes Gemüse zum Mittagessen nicht aufgewärmt werden kann. ; Gemüse (z.B. in Form von Salat), welches kalt verzehrt werden kann, kann problemlos im Arbeitsbereich gegessen werden. Es muss lediglich selbst für Besteck usw. gesorgt werden.	Accessibility	no	no
54928145		no	no		no	no	no
54938651		no	no		no	no	no
54938685		no	no		no	no	no
54945371	Wenn die Sorten Obst schon vergriffen sind, auf die ich gerade Appetit habe	Availability	no	nein	no	no	no
54952780		no	no		no	no	no
54953313	Nein, ich arbeite von zuhause	no	no	Nein	no	no	no
54971894	Nein	no	no	Nein	no	no	no
54980050		no	no		no	no	no
54995454		no	no		no	no	no
54995455		no	no		no	no	no
54995456		no	no		no	no	no
54995458		no	no		no	no	no
54995470		no	no	Zu voller Kühlschrank, keine Lagermöglichkeiten.	Storing	no	no
54995481		no	no		no	no	no
54995482	Nein, keine Hürden	no	no	ja, zu wenig Auswahl an Besteck; ; z.B scharfe Messer	Accessibility	no	no

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54995483		no	no		no	no	no
54995490		no	no		no	no	no
54995494	Kollegen bringen oft Süßes mit	Availability	Social Climate	Nein	no	no	no
54995510		no	no		no	no	no
54995512		no	no		no	no	no
54995515		no	no		no	no	no
54995514	Nien, es gibt keine Hürden	no	no	Nein	no	no	no
54995526	nein	no	no	nein	no	no	no
54995528	die Gerüche lassen dies manchmal nicht zu. Worauf hin ich in die Kantine gehe	hygienic conditions	no		no	no	no
54995535	Nein	no	no	Nein	no	no	no
54995539		no	no		no	no	no
54995560		no	no		no	no	no
54995561	kein Platz	Accessibility	no	die Teeküche ist winzig, keine Ablageflächen; es gibt neben dem Schreibtisch keinen freien Raum, um sich aufzuhalten	Accessibility	no	no
54995572	Obst und Gemüse müssen selber mitgebracht werden. In einigen Firmen gibt es Obst- und Gemüseschalen, die den Mitarbeitern kostenlos zur Verfügung stehen.	Availability	no	Obst und Gemüse müssen selber mitgebracht werden. In einigen Firmen gibt es Obst- und Gemüseschalen, die den Mitarbeitern kostenlos zur Verfügung stehen.	Free F&V Produ	no	no
54995583		no	no		no	no	no
54995590		no	no		no	no	no
54995610		no	no		no	no	no
54995612	Man soll nicht am Arbeitsplatz sondern in der Kantine essen.	rules	no		no	no	no
54995618		no	no	Küche ist extrem unhygienisch	Hygienic conditi	no	no
54995625		no	no		no	no	no
54995632		no	no		no	no	no
54995639	Nein	no	no	Nein	hygienic conditi	no	no
54995641	nein	no	no	Nein	no	no	no
54995647	nein	no	no	nein	Accessibility	no	no
54995661	Keinerlei Möglichkeiten der hygienischen Zubereitung	hygienic conditions	no	Geringe Möglichkeiten der hygienischen Zubereitung, Ausstattung der Kochnieschen (fehlende Besteck e, fehlende Reinigungsmittel, fehlende Tücher)	Hygienic conditi	no	no
54995667		no	no		no	no	no
54995672		no	no		no	no	no
54995678	Nein	no	no	Nein	hygienic conditi	Accessibility	no
54995698		no	no		no	no	no
54995703		no	no		no	no	no
54995711		no	no		no	no	no
54995728	keine Hürden vorhanden	no	no	keine Hürden vorhanden	no	no	no
54995733		no	no		no	no	no
54995743	nein	no	no	keine oder schlechte Lagermöglichkeiten (z. B. Kühlschränke); kleine Küchen, oft dreckig	Hygienic conditi	Accessibility	no
54995748	zu wenig Platz auf dem Tisch, um Dinge abzustellen	Accessibility	no	nein	hygienic conditi	no	no
54995752	kein Platz.	Accessibility	no	Kein Platz	Lounge missing	no	no
54995758		no	no		no	no	no
54995759	zeitmangel	Time	no		no	no	no
54995779	Hygienische Lagermöglichkeiten für Lebensmittel	hygienic conditions	no	Hygienische Lagermöglichkeiten für Lebensmittel	Hygienic conditi	no	no
54995780		no	no		no	no	no
54995794		no	no		no	no	no
54995797	Nein.; Nur eine kleine Küche pro Etage, lässt das Zubereiten von Obst und Gemüse nicht zu.	Accessibility	no	Nur eine kleine Küche pro Etage, lässt das Zubereiten von Obst und Gemüse nicht zu.	Accessibility	no	no
54995800	Nein	no	no	Nein	no	no	no
54995810		no	no	Langer Weg zur Küche	Accessibility	no	no
54995827	nein	no	no	nein	Distance	no	no
54995841		no	no		no	no	no
54995883	Nein	no	no	Nein	no	no	no
54995891	nein	no	no	Küche ist nicht sauber, um Gemüse/Obst zuzubereiten.	Hygienic conditi	no	no
54995952		no	no	Großraumbüro. Manche Kollegen fühlen sich gestört, wenn man zb Karotten ißt. Der Lautstärkepegel ist schon ohne Knabbergeräusche zu hoch.	hygienic conditi	no	no
54995957		no	no	Keine Sitzmöglichkeit für Pausen	Lounge missing	no	no
54995983		no	no		no	no	no
54996035		no	no		no	no	no
54996042	Nein. Hier kann man immer Obst und Gemüse essen, wenn man es vorher zubereiten konnte.	no	no	Die vorhandene Küche ist sehr klein und wenn eine Person bereits in der küche ist, kann man nicht zusätzlich hinein und sein Obst/Gemüse vorbereiten. D.h. Wartezeit für Zubereitung oder Obst wie Bananen, Apfel mitbringen und am Stück essen.	Lounge missing	no	no
54996056	nein	no	no	nein	no	no	no
54996077	Mein Schreibtisch befindet sich in einem Büro im Labor	Accessibility	no	Im Sommer ist der Besprechungstisch, an dem ich esse, auf dem Gang zu heiß, im Winter zu kalt. Das Zubereiten von Obst oder Gemüse ist hier auch nicht vorgesehen	Lounge missing	no	no
54996099	Nein	no	no	Nein	Social Climate	no	no
54996179	nein	no	no	nein	no	no	no
54996186	Nein	no	no	Nein	no	no	no
54996265	nein	no	no	Küche: Hygiene oft mangelhaft, sowohl der Kühlschrank als auch die Arbeitsfläche; kochen: nur Mikrowelle existent	Hygienic conditi	no	no
54996289	no	no	no	no	Accessibility	Social Climate	no
54996286	Nein	no	no	Nein	no	Accessibility	no
54996325	ja, wir haben wenig Platz im Buro, kaum für die Dokumenten usw... es gäbe kaum Platz für ein Obstteller	Accessibility	Availability	ja, wir haben wenig Platz im Buro, kaum für die Dokumenten usw... es gäbe kaum Platz für ein Obstteller ; Außerdem stinkt nach Chemikalien den ganzen Labor... Mann kriegt kein Lust auf Obst	Rules	no	no
54996327	fehlendes Besteck, Möglichkeit Obst abzuwaschen fehlt	Accessibility	hygienic conditions	verschmutzte "Küche".	HYgienic conditi	no	no
54996333	nein	no	no	nein	hygienic conditi	no	no
54996389		no	no		no	no	no
54996491	Nein.	no	no	Nein.	no	no	no
54996557		no	no		no	no	no
54996625	Entfernung von der Küche	Distance	no		no	no	no
54996665		no	no		no	no	no
54996805	etwas wenig Platz, schlecht zu reinigen	Accessibility	hygienic conditions	Nein, Möglichkeit besteht in der Gemeinschaftsküche	no	no	no
54996946	keine	no	no	keine	no	no	no
54996964		no	no		no	no	no
54997000	nein	no	no	naun	no	no	no
54997010		no	no		no	no	no
54997065	Nein	no	no	Nein	no	no	no
54997374		no	no		no	no	no
54997544	Nein	no	no	Nein	no	no	no
54997587	nein	no	no	nein	no	no	no
54997648	nein	no	no	nein	no	no	no
54997677	geringer Platz.	Accessibility	no	Großraumbüro ist nicht gerade dazu ein.	Social Climate	no	no

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54997889		no	no		no	no	no
54998134	nein	no	no	nein	no	no	no
54998556	nein	no	no	Küche zuschlecht ausgestattet	Accessibility	no	no
54998623	Platzmangel	Accessibility	no	Nein	no	no	no
54998839	keingemeinsamer Aufenthaltsraum	Lounge missing	no	keingemeinsamer Aufenthaltsraum	Lounge missing	no	no
54998889	Nein	no	no	Die einzige Hürde ist die Zeit	time	no	no
54999275	Bewirtung am Platz	Accessibility	no	nichts vorhanden	Accessibility	no	no
55001594		no	no		no	no	no
55002904	nein	no	no	nein	no	no	no
55002555	nein	no	no	nein	no	no	no
55003842	Man kann nur am eigenen Schreibtisch vor dem PC essen und hat keinen Platz wo man sich in Ruhe & gerne zum Essen hinsetzen würde	Lounge missing	Accessibility	Keinangemessener Küchenbereich (wenig Platz, dreckig) und keine entsprechende Ausstattung zur Zubereitung von Obst & Gemüse	Accessibility	hygienic conditions	Accessibility
55007184		no	no		no	no	no
55008730		no	no		no	no	no
55016784		no	no		no	no	no
55016955	Manchmal die Zeit	Time	no	Zeit	time	no	no
55017068		no	no		no	no	no
55017071	nein	no	no	nein	no	no	no
55017122	Nein	no	no	Büro im Laborbereich	rules	no	no
55017174		no	no		no	no	no
55017218	nein	no	no	nein	no	no	no
55017616		no	no		no	no	no
55017759	N/A	no	no	N/A	no	no	no
55017818	Nein.	no	no	Nein	no	no	no
55017850	nein	no	no	nein	Availability	no	no
55017851	Ich muss es von zu Hause mitbringen	Availability	no	Ich muss es von zu Hause mitbringen	Availability	no	no
55017917		no	no		no	no	no
55017954	Am Arbeitsplatz selber kann man Obst und Gemüse verzehren.	Accessibility	no	Die vorhandene Küche ist schlecht ausgestattet. Man kann nicht wirklich spülen, da die Lappen binnen weniger Stunde ekelhaft dreckig sind (es gibt nur einen). Es gibt keine Messer mit denen man Obst oder Gemüse schneiden kann. Selbst das normale Besteck ist ständig aufgebraucht und verschwindet.	Accessibility	hygienic conditi	no
55018094	Nein es gibt keine Hürden.	no	no	Nein, gibt es nicht	Accessibility	no	no
55018304	Nein	no	no	Nein	no	no	no
55018634		no	no		no	no	no
55018651	platz	Accessibility	no		no	no	no
55018621	sehr laute, unruhige Atmosphäre, wenig Platz, ungemütlich, Essen am Arbeitsplatz	Social Climate	Accessibility	sehr laute, unruhige Atmosphäre, wenig Platz, ungemütlich, Essen am Arbeitsplatz	Social Climate	no	no
55018690	Nein, Tische sind zwar klein und die Zeit zur Zubereitung fehlt oft, aber ich schneide mir mein Obst und Gemüse jeden Abend zu Hause und nehme es dann mit ins Büro	time	no	Nein, Tische sind zwar klein und die Zeit zur Zubereitung fehlt oft, aber ich schneide mir mein Obst und Gemüse jeden Abend zu Hause und nehme es dann mit ins Büro	no	no	no
55018695		no	no		no	no	no
55018962	Nein.	no	no	Durch die Verglasung im Büro fühlt man sich beim Essen beobachtet	Workplace Desi	no	no
55019003		no	no	Büro/Laborbereich	Social Climate	no	no
55019026	Hygiene im Küchenbereich	hygienic conditions	no		no	no	no
55019080		no	no		no	no	no
55019104	Nein	no	no	Ausstattung und Sauberkeit der Küchenecke hält mich davon ab	Hygienic conditi	Accessibility	no
55019611		no	no		no	no	no
55019640		no	no		no	no	no
55019786	Nein, es liegt an mir selbst und meinem Menschenverstand zu entscheiden, wieviel Obst ich essen möchte. Was hat es mit dem Arbeitsplatz zu tun?	Social Climate	no	Nein, es liegt an mir selbst und meinem Menschenverstand zu entscheiden, wieviel Obst ich essen möchte. Was hat es mit dem Arbeitsplatz zu tun?	no	no	no
55019829	Teilweise ist die Küche nicht mit Obstmessern ausgestattet	Accessibility	no	keine	no	no	no
55019841		no	no	Keine Räumlichkeit für den Verzehr in unmittelbarer Nähe.	rules	no	no
55019885	nein	no	no	Küche ist unappetitlich und schlecht ausgestattet.	Social Climate	no	no
55019941	im Grunde nicht	no	no	Essensgeruch bei z. B. gekochtem Essen im Großraumbüro mit schlechter Luft ist allgemein problematisch und in ; der Küche gibt es noch nicht mal Tageslicht, sprich also auch kein Fenster und Frischluft...	Lounge missing	no	no
55019962	kein	no	no	nein	no	no	no
55020115	Das essen dort ist nicht gerne gesehen.	rules	no	Auch da ist das essen nicht gerne gesehen.	hygienic conditi	Accessibility	no
55020162		no	no		no	no	no
55020212	Nein	no	no		no	no	no
55020254	Nein	no	no	Nein	no	no	no
55020337	NEin	no	no	Laborbereich - Hygienemaßnahmen	Hygienic conditi	no	no
55020464	Ausstattung und Hygiene der Küche; Mangelndes Besteck und Geschirr; Mangelnde Abtrocknungsmöglichkeiten	Accessibility	hygienic conditions		no	no	no
55020465	Platz befindet sich im Labor, wo nicht gegessen werden darf	Accessibility	rules		no	no	no
55020510		no	no		no	no	no
55020892		no	no		no	no	no
55020893		no	no		no	no	no
55021245	zu wenig Platz, Unterlagen könnten beschmutzt werden	Accessibility	no	nein, die Arbeit es zu kaufen und zuzubereiten, hält mich ab	no	no	no
55021454	Nein, Hürden sind keine Vorhanden.	no	no	Es gibt Bereiche, in denen Essen nicht gestattet ist.	Social Climate	no	no
55022454		no	no		no	no	no
55022750		no	no		no	no	no
55022869	Nein	no	no	nein	no	no	no
55022995	Nein	no	no	Nein	no	no	no
55023421	Obst nur in Snackform möglich, da sonst der Aufwand der Zubereitung zu groß wäre. ; ; Gemüse lediglich in der Mittagspause möglich. Nur zubereitbar durch eine Mikrowelle.	time	accessibility	Nein	no	no	no
55023634	Nein, aber ansprechend ist es auch nicht	hygienic conditions	no	Nein, aber ansprechend ist es auch nicht und der Platz ist nicht geboten, zusätzlich einen Teller mit Obst/Gemüse zu platzieren.	Accessibility	no	no
55023843	Nein, es gibt kein Obst. Es gäbe aber auch keine Hindernisse	Availability	no	Nein, es gibt kein Obst. Es gäbe aber auch keine Hindernisse	hygienic conditi	no	no
55023855	zu viel Papierkram herumliegen	Accessibility	no	Nicht genügend Geschirr und Besteck; - Nicht hygienisch genug	Accessibility	no	no
55024147	nein	no	no	nein	availability	no	no
55024590	Zu kleine Küche, kein frisches Obst verfügbar	Accessibility	availability		no	no	no

55025076	Nein	no	no	nein	no	no	no
55025167	nein	no	no	nein, evtl. wenig Besteck (messer zum Schälen,...) im Küchenbereich,; küchenbereich zu klein, sehr dunkel	no	no	no
55025742	Mein Arbeitsplatz befindet sich inmitten stark geruchsbelastendem Umfeld. Daher ist es unappetitlich im Büro nebenher zu essen. ; Mir steht auch nur der Schreibtisch zur Verfügung, der mit Arbeitsutensilien belegt ist.	Accessibility	hygienic conditions	keine zusätzlichen Pausen ; .	time	no	no
55026190		no	no		no	no	no
55026954	nein	no	no	nein	no	no	no
55027138	nein	no	no	nein	no	no	no
55027415	nein	no	no	nein	no	no	no
55027446	nein.	no	no	nein	no	no	no
55027454	Nein	no	no	Nein	no	no	no
55027648	nein.	no	no	Bis auf fehlendes Besteck in der Küche, nein.	Accessibility	no	no
55029018		no	no		no	no	no
55029097	Verzehr von zubereitetem Obst und Gemüse ungehindert möglich	no	no	Küchengröße, Küchenausstattung (Messer, Schäler, etc.), Laborbereich	Accessibility	Accessibility	no
55029397	nein	no	no	nein	no	no	no
55029580	nein	no	no	nein	no	no	no
55031066	Nein.	no	no	Nein.	no	no	no
55031633	Wenn es darum geht Obst zu essen, was nicht am Stück konsumiert werden kann, wie bspw. Apfel oder Banane, sondern einer Zubereitung Bedarf, wie Kiwi oder Melone, gibt es keine geeigneten Möglichkeiten diese zu konsumieren, vorausgesetzt man hat sich nicht selber zuvor präpariert.	Accessibility	no	Wenn es darum geht Obst zu essen, was nicht am Stück konsumiert werden kann, wie bspw. Apfel oder Banane, sondern einer Zubereitung Bedarf, wie Kiwi oder Melone, gibt es keine geeigneten Möglichkeiten diese zu konsumieren, vorausgesetzt man hat sich nicht selber zuvor präpariert.	accessibility	no	no
55032000	Nein	no	no	Nein	no	no	no
55032579	Nein	no	no	Nein	no	no	no
55032765		no	no		no	no	no
55033049		no	no		no	no	no
55033273		no	no		no	no	no
55033290	Nein	no	no	Es gibt keine richtige Kaffeeküche z.B.: Waschbecken und Schneidebrett etc. .	Accessibility	no	no
55033726	Der zeitliche Aufwand der Zubereitung, die Notwendigkeit sich länger vom Arbeitsplatz zu entfernen = bedingt durch räumliche Entfernung von der nächsten Zubereitungs-/Aufbewahrungsmöglichkeit	time	Distance	Nein bzw. siehe Frage 5d	no	no	no
55034010	Nein, mein Arbeitsplatz biete Platz um Obst und Gemüse zu essen	no	no	Nein	no	no	no
55034365	Technik	Accessibility	no	Nein	no	no	no
55035574		no	no		no	no	no
55036246	Nein	no	no	Nein	no	no	no
55037845	Ich sollte grundsätzlich mehr Obst essen, dass ich es nicht tue, liegt aber nicht am Arbeitsplatz. Aus meiner Sicht sind keine Hürden vorhanden.	Social Climate	no	Nein.	no	no	no
55038279	Nein, es gibt keinerlei Hürden.	no	no	Nein, es gibt keine Hürden, aber es könnte mehr scharfe Messer geben um das Obst zuzubereiten.	Accessibility	no	no
55044428	keine Kochstelle, um Gemüse zu kochen.	Accessibility	no		no	no	no
55045089		no	no		no	no	no
55047403		no	no		no	no	no
55054188	kein Platz bzw unhygenisch es dort zuzubereiten, Schreibtisch ist zu klein dafür, kein Platz vorhanden gerade mal 150 cm Schreibtischplatte zur Verfügung	Accessibility	hygienic conditions	Tisch wird Azubi geteilt	Accessibility	no	no
55055264	nein	no	no	nein	no	no	no
55055991		no	no		no	no	no
55055760	Nein	no	no	Nein	no	no	no
55056492		no	no		no	no	no
55057878	nein	no	no	nein	no	no	no
55058155		no	no		no	no	no
55059331	Es gibt keine Hürden. Das Einnehmen von Mahlzeiten zwischen Telefongesprächen und Kollegenkontakten dient jedoch nicht der Gesundheit.; Das Gemüse in der Kantine ist mir von der Qualität zu schlecht. Warmes Gemüse wird sehr lange warmgehalten, Salate stehen mehrere Stunden in der Auslage und sind zu Hochzeiten nicht in ausreichender Menge verfügbar.	Accessibility	no	siehe oben.	Accessibility	no	no
55061804		no	no		no	no	no
55063032	Nein	no	no	Nein	no	no	no
55064068		no	no		no	no	no
55064932	nein	no	no	nein	no	no	no
55066302	Nein	no	no	Nein	no	no	no
55066545		no	no		no	no	no
55068033		no	no		no	no	no
55069557		no	no		no	no	no
55072326	Nein	no	no	Ja, ein Großraumbüro	Lounge missing	no	no
55107626	Die Hürde ist für mich das Zubereiten sowie der Einkauf von Obst & Gemüse. Im Idealfall würde ich mir alles schon zu Hause vorbereiten und dann auf die Arbeit mitnehmen. Alternativ wäre seitens des Arbeitgebers eine Möglichkeit Obst- & Gemüse-Boxen in der Kantine anzubieten. Die Zubereitung auf der Arbeit selbst nimmt mir zu viel Zeit weg.	time	accessibility	Wie oben bereits erwähnt, ist es für mich eher das Zubereiten und weniger der Konsum selbst.	accessibility	no	no
55125951		no	no	Fehlende Fläche und Ambiente zur Bereitung und Verzehr.	Accessibility	no	no
55126439	der Arbeitsplatz besitzt keine Hürden.	no	no	Im Arbeitsbereich ist essen und trinken untersagt. Da es sich um ein Labor handelt, kann dort kein Obst oder Gemüse gegessen werden.	rules	no	no
55126622	Nein.	no	no	Nein.	no	no	no
55126645		no	no		no	no	no
55126952	mein Head Of -> hält generell nichts von Essen am Arbeitsplatz	rules	no	siehe 5d.	no	no	no
55126989	nein	no	no	nein	no	no	no
55126975		no	no		no	no	no
55126994	nein	no	no	nein	no	no	no
55126997		no	no		no	no	no
55126520	nicht wirklich	no	no	ja	no	no	no
55126542	Kein warmes Essen am Schreibtisch, da fließender Übergang zu Laborbereich. Daher nur Rohkost möglich.	rules	no		no	no	no
55126578	nein	no	no	nein	no	no	no
55126620	Nein	no	no	nein	no	no	no
55126628		no	no		no	no	no
55126666	Nein - keine Hürden - normale Ausstattung	no	no	Nein - keine Hürden - normale Ausstattung	no	no	no
55126756		no	no		no	no	no
55126767	kaum	no	no	kaum	no	no	no
55126858		no	no		no	no	no
55127004		no	no		no	no	no

55127062	Nein	no	no	Nein	no	no	no
55127260		no	no		no	no	no
55127324	keine	no	no	keine	no	no	no
55127483	nein	no	no	nein	no	no	no
55127512	Nein	no	no	Nein	no	no	no
55127561	Ja, es ist verboten an meinem Arbeitsplatz zu essen.	rules	no	Ja, in meinem Arbeitsbereich ist es verboten zu essen.	Rules	no	no
55127585	Wir dürfen eigentlich nicht an unserem Schreibtisch essen.	rules	no	Das Essen im Labor ist verboten.	rules	no	no
55127690	nein	no	no	nein	rules	no	no
55127783	Nein	no	no	Nein	no	no	no
55127804	nein	no	no	kein ordentlich platz zum essen	Lounge missing	no	no
55128345		no	no		no	no	no
55129190	Nein	no	no	Nein	no	no	no
55129392	nein	no	no	nein	no	no	no
55129826		no	no	Küche sehr klein, laut, schlecht ausgestattet	Workplace Des	no	no
55129863		no	no	keine scharfen Messer in der Küche	Accessibility	Social Climate	Accessibility
55130062	man muss dran denken es selber mit zu nehmen , - Arbeitsplatz verklebt, wenn man z. B. einen Pfirsich ist.	available	hygienic conditi	Zugang zu Obst und Gemüse ist nicht kostenlos	Accessibility	no	no
55130901		no	no		no	no	no
55130971	Obst sollte durch den Arbeitgeber kostenlos bereitgestellt werden. Nicht nur im 2. OG Altbau für das Top-Management	Accessibility	no	Obst sollte durch den Arbeitgeber kostenlos bereitgestellt werden	Free F&V Produ	no	no
55132735		no	no		no	no	no
55133287	Säfte von Obst und Gemüse führen zu verklebten Fingern (müsste mit Besteck gegessen werden) um ohne Verzögerungen weiterarbeiten zu können.	accessibility	no	Nein	no	no	no
55133600	Nein	no	no	Nein	no	no	no
55134423	keine	no	no	keine	no	no	no
55134910	nein keine Hürden	no	no	Nein	no	no	no
55136834	Kein kostenloses und dezentrales Angebot. Nur kostenpflichtig eine kleine Auswahl in der Kantine	Accessibility	available	Prinzipiell nicht, man muss das Obst nur in den Bereich bringen	accessibility	no	no
55137611	nein	no	no	nein	no	no	no
55139010	Nein, ggf. die Tatsache dass ich nicht jeden Tag am selben Schreibtisch sitze und deswegen Teller/Messer nicht liegen lassen kann	accessibility	no	Kühlschrank sehr voll & unappetitlich	hygienic conditi	storing	no
55139366	nein	no	no	ja, häufig schmutzige Küchenzeile, schlechte Ausstattung (Messer, Teller, Spülmittel, ...)	hygienic conditi	Accessibility	no
55142566		no	no		no	no	no
55143922	Nein	no	no	Nein	no	no	no
55144446	Nein	no	no	Nein	no	no	no
55145700	Bevorzuge nicht am Arbeitsplatz zu essen, aus hygienischen Gründen und Schmatzen	hygienic conditions	no	keine Teeküche vorhanden	Accessibility	no	no
55155195		no	no		no	no	no
55170778	Wir dürfen nicht am Schreibtisch essen	rules	no	Die Küche ist zu weit entfernt.	distance	no	no
55171144		no	no		no	no	no
55172789	nein	no	no	nein	no	no	no
55174983	Nein.	no	no	Nein.	no	no	no
55176738		no	no		no	no	no
55179427	Hygiene, Platz	hygienic conditions	Accessibility	Hygiene, Platz	Accessibility	hygienic conditi	no
55188639	beschränkter Platz auf Schreibtisch, abergenug Möglichkeiten, etwas abzustellen und zu konsumieren.	Accessibility	no	Die Küche ist ein Allgemeinplatz, der leider nicht meinen Wünschen an Sauberkeit und Hygiene entspricht. Dies liegt aber am "Gruppenverhalten" und nicht am Arbeitgeber.	hygienic conditi	no	no
55191083		no	no		no	no	no
55192277		no	no		no	no	no
55217472		no	no		no	no	no
55218890	Zu nah am Labor Bereich.	rules	no	Labor Bereich. Dort ist es selbstverständlich keine Nahrung zu sich zu nehmen.	rules	no	no
55230795		no	no		no	no	no
55235798	nein, die Hürde besteht dann, daran zu denken, etwas mitzunehmen	Social Climate	no	nein	no	no	no
55258340	nein	no	no	nein	no	no	no
55269775	nein	no	no	nein	no	no	no
55272270	Kein gesonderter Bereich , daher evtl. Klecken am Schreibtisch (Tastatur)	Accessibility	no	Der Bereich für die Zubereitung ist sehr klein	Accessibility	no	no
55285730		no	no		no	no	no
55303325	Nein.	no	no	Nein.	no	no	no
55308492	Nein	no	no	Nein	no	no	no
55308745	Ggf unpraktisch während des Telefonierens/ Tippens, aber durchaus umsetzbar	Social Climate	no	Nein.	no	no	no
55309120		no	no		no	no	no
55309492		no	no		no	no	no
55309628		no	no		no	no	no
55309640	Die Küche ist etwas weiter weg.	distance	no	Nein	no	no	no
55312102	nein	no	no	es gibt keine Messer zum Gemüse und Obst schneiden, muss man selbst mitbringen	Accessibility	no	no
55312732	nein	no	no	nein	no	no	no
55320076		no	no		no	no	no
55320491	Offiziell ist es nicht erlaubt am Arbeitsplatz zu essen.	rules	no		no	no	no
55321242	Nein	no	no	Nein	no	no	no
55321424		no	no		no	no	no
55322241		no	no		no	no	no
55323027	Platzmangel, da viele Unterlagen in Griffnähe. Wenig Stauflächen	Accessibility	no	Kein Pausenraum oder eine Möglichkeit zum Rückzug	Lounge missing	no	no
55323582		no	no		no	no	no
55323912		no	no		no	no	no
55328304		no	no		no	no	no
55328407	Nein	no	no	Nein	no	no	no
55328604		no	no		no	no	no
55329023		no	no		no	no	no
55331008		no	no		no	no	no
55331665	Nein, gibt es nicht.	no	no	Die Küche ist nicht direkt im Büro integriert, sodass die Faulheit, zur Küche zu rennen übenwiegt. Weiterhin konsumieren wir im Büro zu viel Schokolade, was mittlerweile schon zur Normalität geworden ist.	distance	Social Climate	no
55333886		no	no		no	no	no
55334407	Am Schreibtisch ist es nicht gern gesehen, dass gegessen wird. Kunden könnten jederzeit kommen, das Telefon klingelt, wichtige Unterlagen liegen auf dem Tisch	rules	no	Es gibt keinen Bereich, in dem man sich zurückziehen könnte. Bzw. der Arbeitsbereich ist wirklich nur fürs arbeiten gestaltet.	Social Climate	Accessibility	no
55335106	Arbeitsplatz zu klein	Accessibility	no	Arbeitsbereich zu klein	Accessibility	no	no
55335311		no	no		no	no	no
55335331	Nein	no	no	Nein	no	no	no
55337341		no	no		no	no	no
55337587		no	no		no	no	no
55340420	nein	no	no	kein Kühlschrank	Storing	no	no
55341162	Nein	no	no	Nein	no	no	no
55342199		no	no		no	no	no
55342453		no	no		no	no	no
55342496		no	no		no	no	no
55346287		no	no		no	no	no
55346921		no	no		no	no	no
55347013		no	no		no	no	no
55351298	Nein	no	no	Nein	no	no	no

55351989	Nein	no	no	Nein	no	no	no
55352745	wenig Platz auf dem Schreibtisch, weil viele Unterlagen drauf sind	Accessibility	no	lange Wege bis zur Kantine	distance	no	no
55354874	Arbeit am PC.	Accessibility	no	Arbeit am PC.	Accessibility	no	no
55362800	keine Hürden	no	no	keine Hürden	no	no	no
55374744		no	no		no	no	no
55375992	nein	no	no	nein	no	no	no
55377656		no	no		no	no	no
55379675	Nein keine Hürden.	no	no	Küche ist schlecht ausgestattet und Hygiene fragwürdig.	hygienic conditi	Accessibility	no
55385976		no	no		no	no	no
55405434	Nein	no	no	Nein	no	no	no
55411796		no	no		no	no	no
55426863	Zeitdruck	time	no	nein, es gibt eine küche	no	no	no
55427908	nein	no	no	Nein	no	no	no
55429262	nein	no	no	nein	no	no	no
55437253		no	no		no	no	no
55444996	Nein	no	no	Nein	no	no	no
55467529	Nein	no	no	EX- Bereich, der verzehr von Lebensmittel ist absolut verboten	rules	no	no
55475620	nein	no	no		no	no	no
55492843	nein	no	no	nein	no	no	no
55501296		no	no		no	no	no
55579451	Nein	no	no	Nein	no	no	no
55613259	Nein	no	no	Nein	no	no	no
55687609		no	no		no	no	no
55688782	nein	no	no	nein	no	no	no
55689634	umständlich	Social Climate	no		no	no	no
55726058	Die mangelnde Zeit.	time	no	Im Großraumbüro fühlen sich manche Kollegen durch Gerüche und knackende Beifügeräusche gestört.	Social Climate	no	no
55780043	Nein.	no	no	Nein.	no	no	no
55784085	nein	no	no	gläserne Büros sorgen dafür, das man sich permanent beobachtet fühlt und nicht möchte, das der Eindruck entsteht man würde die ganze Zeit Pause machen z.B. um Obst zu essen; ; zusätzlich dazu befindet sich eine Meetingarea direkt vor den Büros	Social Climate	no	no
55894567	Keine Küche im gleichen Gebäude	distance	Accessibility	Nein	no	no	no
55894690		no	no		no	no	no
55915835	Verfügbarkeit von Obst	availability	no	nein	no	no	no
55934641	Nein	no	no	Nein	no	no	no
55936475		no	no		no	no	no
55943895	Hände und Arbeitsplatz müsse dann immer gewaschen werden, um nicht alles schmutzig zu machen	hygienic conditions	no		no	no	no
55944360	Kein Essen am Arbeitsplatz erlaubt	rules	no	Keine Moeglichkeit	Accessibility	no	no
55962936	Ich persönlich esse Obst nicht all zu gerne am Arbeitsplatz,weil dann die Tastatur verschmiert usw.,also aus hygienischen Gründen.	hygienic conditions	no	Unsere "Küche" ist nicht soweit ausgestattet, dass man sich schnell mal einen Apfel schneiden könnte oder so	Accessibility	no	no
55974702	Nein	no	no	Ja, da ich erst in die Pause gehen müsste um zu essen	rules	no	no
55995633		no	no		no	no	no
56007773	Leider haben wir ein neues Büro, in dem es keinen Wasseranschluss in der Küche gibt. Wir haben zwar eine richtige Küche samt Geschirrspüler im Büro, jedoch kann man diese nicht nutzen. Man muss jedes Mal ins Bad über den Flur gehen, um Obst u Gemüse zu waschen bzw auch dort Geschirr abwaschen. Das Waschbecken ist auch total klein. Das nervt u da durch mache ich mir so gut wie gar kein Obst u Gemüse mehr.	accessibility	no	Nein; Ich kann wenn ich möchte auch an meinem Tisch Obst u Gemüse essen	no	no	no
56068954		no	no		no	no	no
56070336	Nein	no	no	Bürogang ist ungeeignet	Social Climate	no	no
56072723	Die Zeit, es selbst zuzubereiten.; Ansonsten keine direkten Hürden.; ; + kein vorhandenes Obst/Gemüse - wenn ich nicht selbst daran denke, gibt es auch nichts	time	availability	Die Zeit, es selbst zuzubereiten.; Ansonsten keine direkten Hürden.; ; + kein vorhandenes Obst/Gemüse - wenn ich nicht selbst daran denke, gibt es auch nichts	time	availability	no
56078396	Hygiene	hygienic conditions	no	Nein	no	no	no
56084863	nein	no	no	nein	no	no	no
56106747	nein	no	no	nein	no	no	no
56122857		no	no		no	no	no
56125929		no	no		no	no	no
56136729		no	no		no	no	no
56162220	Nein	no	no	Nein	no	no	no
56167661	Nein	no	no	Nein	no	no	no
56178792	nein	no	no	nein	no	no	no
56218668	Nein, räumlich alles i.O. Es mangelt an der Zeit, da ich häufig gar keine Pause mache oder nur sehr kurz, so dass die Zeit nicht ausreicht, um Gemüse/Obst zu zubereiten.	time	no	Nein, räumlich alles i.O. Es mangelt an der Zeit, da ich häufig gar keine Pause mache oder nur sehr kurz, so dass die Zeit nicht ausreicht, um Gemüse/Obst zu zubereiten.	time	no	no
56223120		no	no		no	no	no
56468783		no	no		no	no	no
56469486		no	no		no	no	no
56486084		no	no		no	no	no
56495274		no	no		no	no	no
56497062	Nein	no	no	Nein	no	no	no
56514113	keine	no	no	Keine	no	no	no
56586232	Es gibt nur eine Mikrowelle, d.h. Gemüse kann nur erwärmt werden	Accessibility	no	Geruchsbelästigung der Kollegen	Social Climate	no	no
56748139	Nein, nur ein paar Schritte entfernt steht Obst (weniger Gemüse) immer Bereit zum Naschen oder Verarbeiten da.	no	no	Nein, nur ein paar Schritte entfernt steht Obst (weniger Gemüse) immer Bereit zum Naschen oder Verarbeiten da.	no	no	no
57136467		no	no		no	no	no
		358	431		338	432	449
		94			114		

56. Gibtes in Ihrem Büro irgendwelche Hürden, die Sie daran hindern, Obst und Gemüse bei der Arbeit zu essen?	Code 1	Code 2	Code 3	57. Bietet Ihr Arbeitgeber besondere Arbeitsplatzbedingungen, die Sie dazu anregen, Obst und Gemüse zu essen? Wenn ja welche?	Group A	Group B	58. Welche Maßnahme würden Sie speziell für die Bedingungen des physischen Arbeitsplatzes empfehlen, die Ihren Obst- und Gemüsekonsum beeinflussen?	Group A	Group B
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
kein Hindernisse	no	no	no	keine besonderen Bedingungen oder Ermutigungen	no	no	ein Angebot an rohem Obst und Gemüse	Availability	no
keine Kantine im Gebäude, langer Weg zu Obst und Gemüse.	Distance	no	no	Nein	no	no	Sauberkeit	hygienic conditions	no
Die Küche ist zur Zubereitung zu klein, bzw. es gibt zu wenig Platz zur Ablage.	Accessibility	no	no	Stehtische auf denen hin und wieder ein Obstkorb steht.	Free F&V products	no	Räumlichkeiten in der Küche lassen sich leider nicht ändern.	no	no
Nein	no	no	no		no	no		no	no
	no	no	no		no	no	Einen Obstkorb bzw. eine Obstschale in jedem Büro, damit Mitarbeiter Ihr mitgebrachtes Obst dort ablegen können und es immer offen herum liegt.	Availability	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Hur	no	no	no	Nein	no	no	Keine	no	no
Nein	no	no	no	Im Gang wird zweimal die Woche eine obstschüssel zur Verfügung gestellt. Diese ist auch sehr schnell leer.	Free F&V products	no	Verfügbarkeit geeigneter Küchenmesser	Accessibility	no
Nein	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no		no	no
	no	no	no	Auf jedem Stockwerk gibt es eine Küche, die zum Teil ausgestattet ist. Hier kann Essen zubereitet werden.	Accessibility	no	mehr Besteck (Vor allem Messer)	Accessibility	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein!	no	no	Shake/Mixer, Obstschale, Obstschäler.	Accessibility	no
Nein	no	no	no	Nein	no	no	Kostenfrei an verschiedenen Orten des Unternehmens zur Verfügung gestelltes Obst und Gemüse.	Free F&V products	no
nain	no	no	no	nein	no	no	na	no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Keine	no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein und das Essen in der Kantine ist alles andere als ausgewogen	no	no	Besseres Angebot in den Kantinen- oder Fruchtkörben	Availability	no
Nein	no	no	no	Nein	no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Leider nein	no	no	Obstschalen	Accessibility	no
	no	no	no	Küche mit Besteck etc	Accessibility	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Meeting Punkte in denen Obst ausliegt. Dieses kann dort direkt verzehrt werden.	Free F&V products	no	Massnahmen sind ausreichend.	no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
zu kleine Kühlschränke für Lagerung von Obst und Gemüse; keine ausreichende Küchenausstattung	Storing	no	no	Kantine mit ausreichender Auswahl	Accessibility	no	Küchenausstattung anpassen und größere Kühlschränke zur Verfügung stellen, mehr „Teeküchen" für Mitarbeiter	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Küche einrichten	Accessibility	no
nain	no	no	no	nein	no	no		no	no
Nein	no	no	no	Nein	no	no	frei verfügbares Obst vom Arbeitgeber und ich würde mehr Obst konsumieren	Free F&V products	no
Größere Küche mit Tisch und Sitzmöglichkeit im Stockwerk tiefer. Dadurch aber Weggang vom Arbeitsplatz. Das worauf man Appetit hat ist vielleicht nicht da oder muss erst besorgt werden. Das kostet Zeit in der Pause.	Distance	Time	Availability	Leider wird vom AG der Obst- und Gemüsekonsum nicht unterstützt.	no	no	Größerer Kühlschrank mit speziellen Obstfächern; - Vorbereitetes Obst oder Gemüse (gekocht, entkernt, geschält, etc.); - Kleine Portionsgrößen (in Scheiben, gewürfelt, etc.)	Storing	no
nain	no	no	no	nein	no	no	Höhenverstellbarer Schreibtisch	Workplacee Design	no
	no	no	no		no	no	Ein Schneidebrett kaufen	Accessibility	no
Nein	no	no	no	Nein	no	no	Equipment in der Küche, Bereitstellung von Obst und Gemüse durch den Arbeitgeber	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Neinkein	no	no	Keine	no	no
nain	no	no	no	nein	no	no	keine	no	no
Nein	no	no	no	Nein, welche sollten das sein?	no	no	Keine	no	no
Nein	no	no	no	Nein	no	no	Bessere Ausstattung des Küchenequipments und mehr Platz	Accessibility	no
	no	no	no		no	no		no	no
Nein	no	no	no	Ja, wir haben jeden Do einen Apfeltag, an dem jeder Mitarbeiter Äpfel in jedem Büro-Arbeitsbereich kostenlos nehmen kann. ; Die Kantine bietet jeden Tag frischen Obstsalat an.	Free F&V products	Accessibility		no	no
	no	no	no		no	no		no	no
Nein	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Obstkorb Gemeinschaftsaufenthalt bei Küche	Free F&V products	no	Besseres Equipment in der Küche für die Zubereitung von Obst. Dusche, damit Sport in der Mittagspause möglich ist. Verständnis im Umgang mit der eigenen Gesundheit - bewusste Ernährung, sowie regelmäßige Bewegung.	Accessibility	no
	no	no	no		no	no		no	no
Ausstattung der Küche (fehlendes Geschirr/Besteck)	Accessibility	no	no	Nein	no	no		no	no
Nein	no	no	no	Nein	no	no	Keine	no	no
Nein	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Keine	no	no
Zu wenig breites Angebot an Obst in Kantine / Cafeterie	Availability	no	no	Nein	no	no	Scharfe Messer; Schneidebrett; Schäler	Accessibility	no
Fehlender Essbereich	Lounge missing	no	no		no	no	Siehe oben Küche und Essbereich	hygienic conditions	no
	no	no	no	Momentan ist dies leider nicht der Fall.	no	no	Jeder Arbeitsplatz sollte in unmittelbarer Nähe eine kleine Küche mit Equipment, wie Besteck, Mikrowelle, Kühlschrank etc. haben. Vorallem im Sommer ist das Kühlen von Obst und Gemüse sehr wichtig. Es ist von Vorteil eine größere Menge an Obst und Gemüse am Arbeitsplatz lagern zu können, damit jederzeit der Konsum von Obst und Gemüse gesichert wird.	Accessibility	Accessibility
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
nain	no	no	no	nein	no	no	ggf. Erinnerungen / verschiedene Zubereitungsmöglichkeiten von Obst	Communication	Accessibility
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Keine	no	no
Nein	no	no	no	Ja. Obstkörbe werden jeden Morgen ausreichend bereitgestellt in verschiedenen Bereichen.	Free F&V products	no	Ein Mixer zum Zubereiten von Smoothies wäre klasse.	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Zu weiter Weg zur Kantine, um sich zwischendurch einen Snack/Obst oder Gemüse holen zu können.	Distance	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Mehr Besteck (scharfe Messer) zur Verfügung stellen	Accessibility	no

	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Das visuelle Angebot von Obst und Gemüse in Form von Körben, z. B.	Accessibility	no
nein	no	no	no	nein	no	no		no	no
	no	no	no	nein.	no	no	eine kleine Küche.	Accessibility	no
Sauberkeit der Küche & teilweise nicht ausreichend ausgestattet;	hygienic conditi	no	no	Zwei Mal die Woche Obstkorb	Free F&V products	no	Bessere Ausstattung der Küche mit Schneidebrettern u. kleinen Messern; ; Sauberkeit/Modernisierung der Küche	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
keine Aufenthaltsräume jenseits der meistens überfüllten Kantine; Weg zur Kantine je nach Arbeitsplatz sehr weit, nichts fürzwischen durch	Lounge missing	distance	no	nein	no	no	Aufenthaltsplatz jenseits des Schreibtisches; küchenähnliche Einrichtungen mit Arbeitsfläche	Lounge Missing	no
	no	no	no	s.o.	no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Ja, die Hygiene in der Küche	hygienic conditi	no	no	Nein	no	no		no	no
	no	no	no	Nein	no	no	Modernisierung und regelmäßige Reinigung der Küche	hygienic conditions	no
	no	no	no		no	no		no	no
Nein	no	no	no	Obstkorb	Free F&V products	no	größere Küche	Accessibility	no
	no	no	no	Nein	no	no	Ausstattung in der Küche ist mangelhaft. ; Keine vorhandenen Arbeitsmaterialien um etwas vorzubereiten.	Accessibility	no
nein	no	no	no	nein	no	no	Geschirr und Besteck zum Zubereiten zur Verfügung stellen	Accessibility	no
Schlechtes Angebot und zu erhöhte Preise der Kantine	Availability	Accessibility	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Genug Besteck um Obst zu schneiden und eine Spülmaschine, um das Besteck zu saubern.	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
keine Hürden vorhanden	no	no	no	nein	no	no	mehr Platz am Tisch	Accessibility	no
	no	no	no		no	no		no	no
keine oder schlechte Lagermöglichkeiten (z. B. Kühlschränke); kleine Küchen, oft dreckig	Storing	no	no	nein	no	no	Obst in Meetings, anstelle von Keksen,; Obst in der Kantine, anstelle von Nachtisch, Obststeller in den Meetingareas	Availability	no
weite Laufwege zur Kantine/Supermarkt	Distance	no	no		no	no	mehr Platz	Accessibility	no
Nein	no	no	no	Nein	no	no	Mehr Pflanzen. Mehr Grün	Workplcace Design	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Hygienische Lagermöglichkeiten für Lebensmittel	hygienic conditi	no	no	Nein	no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nur eine kleine Küche pro Etage, lässt das Zubereiten von Obst und Gemüse nicht zu.	Accessibility	no	no	Nein	no	no	Keine besonderen	no	no
Nein	no	no	no	Nein	no	no		no	no
Wenig Arbeitsfläche in der Küche, kleiner und dreckiger Kühlschrank	accessibility	hygienic conditi	no	Nein	no	no	Besseres Equipment in der Küche, sauberer Kühlschrank mit Platz	Accessibility	no
nein	no	no	no	Eigene Fruchtverarbeitung	Accessibility	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Obstkorb mit guter Auswahl	Free F&V products	no	Keine Änderung notwendig	no	no
nicht freundlich gestaltet, um an einem Platz zu verweilen und Obst/Gemüse	Lounge missing	no	no	nein, erbietet keine besonderen Bedingungen oder Anreize	no	no	Saubere Küche, kostenloses Obst für alle Mitarbeiter	hygienic conditions	no
Siehe oben. Man achtet teilweise darauf, Kollegen nicht zu stören.	Lounge missing	no	no		no	no	Besser ausgestattete Küche, Obst und Gemüse Angebot auch in Nebengebäuden (kleiner Stand täglich zu bestimmten Zeiten) oder noch besser: kostenloses obst und Gemüse in jedem Stockwerk in der Küche	Accessibility	no
keine Sitzmöglichkeit für Pausen	Lounge missing	no	no		no	no	größe des Schreibtisches, Platzangebot	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Es wird kein Obst- oder Gemüsekorb angeboten. Demnach wird man auch nicht auf deren Verzehr angesprochen/erinnert.	Availability	no	no		no	no	Obst während Meetings bereitstellen. ; Obstkorb in Kantine und am Empfang bereitstellen für kostenlosen Verzehr und regelmäßigem Nachschlag. Wir sind viele Mitarbeiter.	Free F&V products	Availability
keine saubere Küche. es macht keine Freude Obst in der Küche zuzubereiten	hygienic conditi	no	no	nein	no	no	saubere Küche, genug Küchenutensilien (Messer, Gabel, usw)	hygienic conditions	no
Mein Schreibtisch befindet sich in einem Büro im Labor, ich kann ausschließlich an meinem Schreibtisch oder auf dem Gang etwas essen. Der Gang in die Kantine führt durch das gesamte Gebäude - für einen Apfel oder eine Karotte ein weiter Weg.	distance	no	no	nein	no	no	Ein Aufenthaltsraum mit Teeküche, Tischen und Stühlen wäre hier sehr hilfreich. Aber bei dem aktuellen Raummangel wird das ein Wunschtraum bleiben	Lounge Missing	no
Nein	no	no	no	Obstkörbe in Meetingräumen, "Gesunde Wochen" in der Kantine	Free F&V products	Accessibility		no	no
nein	no	no	no	nein	no	no		no	no
Nein	no	no	no	Nein	no	no	Verbesserung der Ausstattung der Küche	Accessibility	no
Hygiene in der Küche	hygienic conditi	no	no	nein	no	no	Hygiene verbessern	hygienic conditions	no
no	no	no	no	no	no	no	none	no	no
Ja, meine Kollegen, die immer viel zu viele Süßwaren mitbringen	Social Climate	Social Climate	no	Nein	no	no	Besseres Equipment in der Küche, bps. Schneidebrettchen, Messer und Schälchen	Accessibility	no
ja, wie gesagt, es gibt keine geeignete platz um Obst zu essen, kaum fürdie Dokumenten usw... es gäbe kaum Platz für ein Obstteller	Accessibility	no	no	Nein, nur die Kantine, ist aber für meistens zu weit weg von Arbeitsplatz	no	no	ein Tisch mit Obstteller und Zubereitungsküchengeräte.	Availability	no
nein	no	no	no	keine	no	no	Handtuchspender, Möglichkeit Bioabfall zu entsorgen	Accessibility	no
nein	no	no	no	nein	no	no		no	no
	no	no	no		no	no		no	no
Nein.	no	no	no	Nein.	no	no	Keine	no	no
	no	no	no		no	no		no	no
Entfernung aus der Kantine	distance	no	no		no	no		no	no
	no	no	no		no	no		no	no
etwas wenig Platz, schlecht zu reinigen	Accessibility	no	no	Eher nicht	no	no		no	no
keine	no	no	no	nein	no	no	Wenn ein Obstkorb mit frischem und abwechslungsreichem Obst und Gemüse in der Küche stehen würde, der von meinem Arbeitgeber regelmäßig aufgefüllt würde, würde sich mein Konsum an Obst und Gemüse sicherlich steigern.	Free F&V products	no
	no	no	no		no	no		no	no
nein	no	no	no	Ja, Flurküchen	Accessibility	no	Flurküchen vorhalten	Accessibility	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein keine einzige.	no	no	Helle, gut belüftete und klimatisierte Räume mit blick nach draußen. Mehr Platz.	Workplcace Design	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Einen speziellen gekennzeichneten Platz für Obst Körbe.	availability	no
nein	no	no	no	nein	no	no		no	no
keine richtige Zubereitungsmöglichkeit (Schneidebrett, Teller, Messer fehlen in unserer Kaffeeküche)	Accessibility	no	no		no	no		no	no
	no	no	no	Eine stark frequentierte Küchenzeile mit Sitzmöglichkeiten ist vorhanden, wo man notgedrungen Obst essen kann, oder man bringt sich selbst Obst mit.	Accessibility	no	Obst kostenfrei und attraktiv anbieten	Free F&V products	no

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	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no	einen Obstteller kann man überall hin stellen, keine spezifischen Maßnahmen erforderlich	no	no
nein	no	no	no	nein	no	no	Küchenausstattung	Accessibility	no
Unzureichend ausgestattet Küche	Accessibility	no	no		no	no	mehr Platz; Obstkorb	Accessibility	no
kein gemeinsamer Aufenthaltsraum	Lounge missing	no	no	nein	no	no	Aufenthaltsraum mit einem Korb Obst und Gemüse	Lounge Missing	no
Nein	no	no	no	Nein	no	no		no	no
nein	no	no	no		no	no	Bewirtung am Platz	availability	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no		no	no
nein	no	no	no	nein	no	no	höhenverstellbare Schreibtische; - Waschbecken im Büro; - entsprechende Farbgestaltung der Büros, die dazu anregen gesund zu essen --> grün; - Papierzum Abtrocken in der Küche, ausreichend Messer zum Schneiden, Geschirr, Besteck	Workplacee Design	no
keine ansprechende Küche und keine entsprechende Ausstattung zur Zubereitung von Obst & Gemüse	Accessibility	Accessibility	no	Nein	no	no	Eine ordentliche Küche bzw. Küchenzeile, um deren Pflege sich nicht die Mitarbeiter kümmern (dann fühlt sich keiner verantwortlich und alles verwahrlost) sondern die Reinigungskraft, in der es eine Spülmaschine gibt und nicht jeder sein Geschirr im Waschbecken stehen lässt und die gut ausgestattet ist (Geschirr, Besteck, Schneidemesser, Schneidebretter, ggf. kleine Kochplatte), um eigene Mahlzeiten zuzubereiten	Accessibility	hygienic conditions
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Zeit	time	no	no	Nein	no	no		no	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no	keine	no	no
Nein	no	no	no	Nein	no	no		no	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no	Einen vernünftigen Pausenraum	Lounge Missing	no
	no	no	no		no	no		no	no
keine Herdplatten in Küchen vorhanden, Gemüse kann nicht angebraten werden.	Accessibility	no	no	N/A	no	no	ggf. Licht	Workplacee Design	no
Nein	no	no	no	Ja, man in die Kantine Obst und Gemüse essen. Sogar im Büro ist das erlaubt.	Social Climate	no	gut ausgestattete Küche würde ausreichen	Accessibility	no
nein	no	no	no	nein	no	no	Ausstattung der Küche müsste verbessert werden, wenn mehr Kollegen sich Obst oder Gemüse zubereiten sollten (Messer, Schneidebrettchen ...); --> Nutzung der Küche würde steigen, wodurch auch die Reinigung der Küche optimiert werden muss	Accessibility	no
Ich muss es von zu Hause mitbringen	availability	no	no		no	no		no	no
	no	no	no		no	no		no	no
Die vorhandene Küche ist schlecht ausgestattet. Man kann nicht wirklich spülen, da die Lappen binnen weniger Stunde ekelhaft dreckig sind (es gibt nur einen). Es gibt keine Messer mit denen man Obst oder Gemüse schneiden kann. Selbst das normale Besteck ist ständig aufgebraucht und verschwindet	hygienic conditi	Accessibility	Accessibility	Nicht wirklich	no	no	Bessares Equipment in der Küche, dass auch nicht ständig verschwinden darf	Accessibility	no
nein	no	no	no	Nein	no	no		no	no
Nein	no	no	no	Nein	no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no	kein Equipment	Accessibility	no
prinzipiell nein, wobei die Kantine der einzige Ort ist, an dem man sich richtig hinsetzen und essen kann, jedoch herrscht häufig ein Platzproblem (zu wenige Plätze für zu viele Angestellte während der Stoßzeiten)	Accessibility	no	no	nein	no	no	eine Gemeinschaftsküche oder die offizielle Unterstützung/Erlaubnis sich Obst/Gemüse am Arbeitsplatz zuzubereiten.; entsprechendes Equipment (richtige, mehrere Messer, Brettchen, Schäler usw.)	Accessibility	no
	no	no	no	Nein, Tische sind zwar klein und die Zeit zur Zubereitung fehlt oft, aber ich schneide mir mein Obst und Gemüse jeden Abend zu Hause und nehme es dann mit ins Büro	no	no		no	no
	no	no	no		no	no		no	no
Mehr Angebot von Gemüse in der Kantine	Availability	no	no	Nein	no	no	Grundsätzlich weniger offen einsehbare Bürorräume. Eine Ausstattung in der Küche ist kaum vorhanden. Besteck, scharfe Messer etc. fehlen oder sind in schlechter Qualität vorhanden.	Accessibility	no
nein	no	no	no	nein	no	no	Bessere Trennung Labor/Büro	Workplacee Design	no
	no	no	no	nein	no	no		no	no
	no	no	no		no	no		no	no
Neben der Kantine sind so gut wie keine Pausenräume vorhanden	Lounge missing	no	no	Salattheke und Obstangebot in der Kantine, Angebot von Obstsalat und Obst während Kundenmeetings und großer interner Meetings	Accessibility	Free F&V products	Bessere Ausstattung der Küchen (v.a. Spülmaschinen) sowie die Sauberkeit in den Küchen	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein, es liegt an mir selbst und meinem Menschenverstand zu entscheiden, wieviel Obst ich essen möchte. Was hat es mit dem Arbeitsplatz zu tun? ; Und warum soll mein Arbeitgeber mir sagen, es ist gesund Obst zu essen?	no	no	no	Nein	no	no	Ich kenne andere Firmen, in denen eine Schale Obst im Gang steht, wo sich Mitarbeiter bedienen können. ; Prinzipiell eine schöne Idee, aber liegt es nicht auch an einem selbst, an sich zu denken und sich auch mal einen Apfel oder einen Obstsalat von zu Hause mitzubringen und den dann zu essen? Ich denke nicht, dass das die Aufgabe des Arbeitgebers sein sollte.; Die Kantine könnte sicher mehr Obst anbieten, saisonal. Die Preise sollten dann aber nicht überirdisch sein, sondern ähnlich den Preisen im Supermarkt, immerhin würden die Sachen ja im Großhandel zu anderen Konditionen als Firma bezogen.	Social Climate	Accessibility
keine	no	no	no	Bilderwelt im Treppenhaus	Workplacee Design	no	kleine Obstkörbe für die Teams + Obstmesser	availability	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no		no	no
	no	no	no	nein	no	no	keine Großraumbüros; adäquate konstante Temperaturbedingungen (Sommer wie Winter);, eine einladende helle Küche bzw Essgelegenheit mit Tageslicht und Fenster zum öffnen,, wo man sich gerne Mittags trifft und miteinander reden kann	Workplacee Design	no
grundsätzlich nein	no	no	no	nein	no	no	wir haben alles ausser die Obst und Gemüse :-)	availability	no
Man müsste extra in einen anderen Bereich gehen und extra Pausen einlegen.	distance	no	no	Nein	no	no	Aufstellen von Obstkörben.	availability	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Die Küche ist sehr unhygienisch und es gibt nicht ausreichend Teller und Besteck das Obst in kleine Portionen zu schneiden. Es wäre daher ratsam, wenn die Küche einladender wäre	hygienic conditions	Accessibility
Nein	no	no	no		no	no		no	no
Laborbereiche	distance	no	no	Nein	no	no	eine kleine Küche, Möglichkeit für die Zubereitung von Obst/ Gemüse	Accessibility	no
	no	no	no		no	no	Pflanzen im Büro, ; Mehr Geschirr, Besteck und Tücher zum Abtrocknen, ; Obstkorb im Flur	Workplacee Design	no
	no	no	no		no	no	Schneidebrettchen, Messer, Schalen und Teller, Kühlschrank	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
es ist kein Obst und Gemüse da	availability	no	no	nein	no	no	Bereitstellung von Obst und Gemüse	availability	no
Nein	no	no	no	Nein	no	no	Bereitstellung von Obst an öffentlich erreichbaren Stellen. Studien haben gezeigt, dass Positionieren von Obst auf Augenhöhe den Konsum anregt.	Availability	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no		no	no
Nein	no	no	no	Eine Anregung nicht wirklich. Zubereitung in Küche möglich.	no	no	Mehr Platz in der Küche für die Zubereitung.	Accessibility	no
Nein	no	no	no	Nein	no	no	Eine Schale mit Obst ausstellen.	availability	no
Nein	no	no	no	Nein	no	no	Mehr Platz, keine eingeengten und überfüllten Großraumbüros	Accessibility	no
Nein, es gibt kein Obst. Es gäbe aber auch keine Hindernisse	availability	no	no	Nein	no	no	Zur Verfügung stellen von Obst ent einmal	availability	no
	no	no	no	Nein	no	no	Mehr Equipment in der Küche, vor allem Besteck	Accessibility	no
nein	no	no	no	nicht das ich wüsste	no	no		no	no
Zu kleine Tische	Accessibility	no	no		no	no	Obstschalen in jeder Abteilung	availability	no

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Ausstattung Küche	Accessibility	no	no		no	no		no	no
nein	no	no	no	nein	no	no	größerer, heller, sauberer Küchenbereich; gut sortiertes Besteck, Teller, Schüsseln,...	Accessibility	no
außer Kantine ist kein zusätzlicher Pausenraum vorhanden. Die Kantine ist immer sehr stark frequentiert, sodaß auch ein hoher Lärmpegel entsteht.	Lounge missing	no	no	keine	no	no	Ein zusätzlicher Pausenraum sowie eine kleine Küchenzeile wären traumhaft.	Lounge Missing	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no	keine	no	no
Kein Platz für zubereitung. Man muss alles schon zuhause fertigen und es ist dann später nicht mehr so frisch.	Accessibility	no	no	nein	no	no	Ein Obstkorb beim Tisch im Büro zu haben.	availability	no
nein	no	no	no	nein	no	no	k.A	no	no
nein	no	no	no	nein	no	no	keine weitere Bedingungen.; Es ist möglich hier Obst und Gemüse zu essen.	no	no
Nein	no	no	no	Nein	no	no	ist ausreichend	no	no
Bis auf fehlendes Besteck in der Küche, nein.	Accessibility	no	no	Nein, kein Obst und Gemüse außer in der Kantine.	no	no	Wenn es mehr Bilder von Obst und Gemüse gäbe z.B. oder das Equipment dieses zuzubereiten.	Accessibility	no
	no	no	no		no	no		no	no
lange Wege zwischen Arbeitsplatz und Kantine/Küche, fehlende Arbeitsplätze	distance	no	no	nein	no	no	Zubereitungsmöglichkeiten (Küche, Messer, etc.), kürzere Wege Arbeitsplatz-Kantine, Angebot von aufgeschnittenem Gemüse/Obst in der KantineBilder von P	distance	Accessibility
Ungeeignete Küchenausstattung, um das Obst/Gemüse zuzubereiten. Z.B. fehlende scharfe Messer/ Schneidunterlagen	Accessibility	no	no	nein	no	no	Bessere Ausstattung de Küchenbereiches (Messer, Schneidbretter). Größere Arbeitsfläche	Accessibility	no
nein	no	no	no	nein	no	no	Obst und Gemüse an verschiedenen Bereichen, als nur in der Kantine anbieten.	availability	no
Nein.	no	no	no	Nein.	no	no	Obstkorb in der Küche. Schärfere Messer um Gemüse zu schneiden.	availability	no
Die Möglichkeit der Präparation in einer Küche oder Ähnliches	Accessibility	no	no	Nein	no	no	Die Bereitstellung einer Küche mit Spülmaschine inkl. Messer und Brettchen zur Vorbereitung und die Bereitstellung von kostenlosem Obst.	Accessibility	no
Nein	no	no	no	Nein	no	no		no	no
Nein	no	no	no	Nein	no	no	Sauberer Kühlschrank	hygienic conditions	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	errichten einer Kaffeeküche für die Abteilung	Accessibility	no
Vorportioniertes Obst ist nicht verfügbar und in der Küche gibt es zu wenig Schneidebretter und Messer	accessibility	Accessibility	no	Nein	no	no	Bessere Möglichkeiten der Zubereitung, Verfügbarkeit bereits bearbeiteten Obst/Gemüse (weniger Aufwand der Zubereitung)	Accessibility	no
Ja, die Teeküche bietet nur wenig Platz Obst und Gemüse adäquat zuzubereiten. Ebenso fehlt es an der Ausstattung (Messer, Brettchen etc.) Des Weiteren sind die Kühlschränke teilweise sehr klein um Obst und Gemüse zu lagern. ; ; Ich bereite mir mein Obst und Gemüse daher zu Hause zu und nehme es dann mit.	Accessibility	Storing	no	Nein	no	no	Das Equipment in der Küche sollte besser sein. Scharfe Messer, Brettchen. Hier fehlt oftmals schon an Küchenhandtüchern. Schön wäre auch ein Raum für die Mittagspausen, wenn man nicht in die Kantine gehen möchte. Diese Möglichkeit bietet nicht jedes Bürogebäude.	Accessibility	no
Nein	no	no	no	Nein	no	no	Mehr Arbeitsfläche in der Küche	Accessibility	no
	no	no	no		no	no		no	no
Nein	no	no	no		no	no		no	no
Nein.	no	no	no	Ich denke, dass die Bedingungen für den Konsum von Obst neutral sind.	no	no	Ich würde vielleicht einen Apfel lassen, wenn am Eingang jeden Tag frische Äpfel zum mitnehmen stehen würden.	availability	no
Nein, es gibt keinerlei Hürden. Im Gegenteil es gibt mehrere Küchen und Kühlschränke die eine Aufbewahrung und Zubereitung ermöglichen.	no	no	no		no	no	Arbeitsflächen und Geräte (Mikrowelle) um Gemüse/Obst zuzubereiten; Möglichkeiten diese Aufzubewahren (Kühlschrank mit ausreichend Platz); Ausstattung der Küche (ausreichend Besteck)	Accessibility	no
Küche ohne Herd	Accessibility	no	no	Nein	no	no	Aufstellen eines Herdes. Aufstellen von Obstkörben z. B. in der Küche oder bei Besprechungen.	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no	Küche wie im Neubau um überhaupt etwas zubereiten zu können, sofern im eigenen Büroabteil nicht vorhanden	Accessibility	no
mangelnde Hygiene im Küchenbereich	hygienic condit	no	no	nein	no	no	Konsum wird nicht durch mein Umfeld beeinflusst	no	no
	no	no	no		no	no		no	no
Nein	no	no	no	nicht das ich wüsste	no	no	mehr Raumfläche, derzeit ist es sehr eng	Accessibility	no
	no	no	no		no	no		no	no
nein	no	no	no	ja, die Küche	no	no	Equipment in der Küche	Accessibility	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Keine	no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Es muss leicht verfügbar sein bzw. in der Nähe schnell "Aufzubreiten" sein spriche/ Waschen/ Schälen Teller/ Messer...	Accessibility	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no	Blender zur Verfügung zustellen, mehrere Tische und Bänke draußen zu stellen	Lounge Missing	no
Nein	no	no	no	Ja, in der Küche und in der Kantine.	Accessibility	no	Nichts, alles ist gut.	no	no
	no	no	no		no	no	Besseres Equipment in der Küche und Aufbewahrungsmöglichkeit	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Ja, die Kantine ist im anderen Gebäude	distance	no	no	Ja, wir haben in jeden Stockwerk eine Küche	Accessibility	no	Der Schreibtisch sollte viel platz bieten.	Accessibility	no
Wie oben bereits erwähnt, ist es für mich eher das Zubereiten und weniger der Konsum selbst.	accessibility	no	no	Nein, besondere Anregungen gibt es meines Erachtens nicht.	no	no	Sauberer Platz zum Lagern und Zubereiten sowie die Zeit zum Zubereiten.	Time	no
Fehlende Fläche und Ambiente zur Bereitung und Verzehr.	Accessibility	Social Climate	no	Derzeit noch nicht.	no	no	Offenes Büro und Arbeitsbereich der zur Entfaltung dienen kann. Dies könnte auch zu verstärktem Obst- und Gemüseverzehr animieren.	Accessibility	no
	no	no	no	Angeboten werden Arbeitsplatz und Sitzmöglichkeiten vor den Laborstationen.	Lounge Missing	no		no	no
Nein.	no	no	no	Nein.	no	no		no	no
	no	no	no		no	no		no	no
	no	no	no	nein	no	no	Ein Obstkorb im Küchenbereich wäre eine Idee.; 1x pro Woche frisch auffüllen, würde sicher dazu anregen, mehr Obst zu essen.	availability	no
nein	no	no	no	Ja, Waschbecken / Mikrowelle in der Nähe	Accessibility	no		no	no
	no	no	no		no	no		no	no
teilweise Laborbereich	distance	no	no	nein	no	no	mehr Platz	Accessibility	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no	wär eine platz wo man die Obst und so weiter vorbereiten kaennen	Accessibility	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no		no	no
Ich muss Obst von zuhause mitbringen, da die Kantine zu weit entfernt ist	distance	availability	no	Nein	no	no	ein Waschbecken in der Nähe	Accessibility	no
	no	no	no		no	no		no	no
Nein - Der Konsum von Obst/Gemüse kann nur beeinflusst werden durch Aufklärung über die Ernährung. (Ich finde nicht das es die Aufgabe des Arbeitgebers ist)	no	no	no	Es gibt eine Küche.	Accessibility	no	Nein - keine Hürden - normale Ausstattung	no	no
	no	no	no		no	no		no	no
kaum	no	no	no	nein	no	no	nicht nötig	no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no

Nein	no	no	no	Nein	no	no	Eine modernere Küchenzeile mit einer guten Möglichkeit (Arbeitsplatte) um Obst und Gemüse zu zubereiten (waschen/schneiden) sowie entsprechende Gegenstände dazu (Schneidbretter, Messer, Gemüseschäler etc.)	Accessibility	Accessibility
	no	no	no		no	no		no	no
keine	no	no	no		no	no	frei verfügbare Obstkörbe mit regelmäßig frischem Obst an neutralen Punkten	availability	no
nein	no	no	no	nein	no	no		no	no
Nein	no	no	no	Nein	no	no	Auf jedem Stockwerk könnte Obst angeboten werden, nicht nur in der Kantine (anderes Gebäude)	availability	no
	no	no	no	Nein, leider nicht.	no	no		no	no
Nein	no	no	no	Nein	no	no	Lasst uns an unseren Schreibtischen essen.	Rules	no
nein	no	no	no	nein	no	no		no	no
Möchte die Kollegen nicht mit Essgeräuschen stören	Social Climate	no	no	Nein	no	no		no	no
kein ordentlich platz zum essen	Lounge missing	no	no	nein	no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no		no	no
	no	no	no		no	no	Bessere Küche	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no	sollte überall stehen um so niederschwellig wie möglich den Konsum zu fördern	availability	no
	no	no	no		no	no	Bessere Ausstattung der Küchen	Accessibility	no
Obst sollte durch den Arbeitgeber kostenlos bereitgestellt werden	availability	Accessibility	no	Nein	no	no	Obstkorb in den Küchen zur freien Verfügung	availability	no
	no	no	no		no	no		no	no
Eine zur Verfügung stehende Küche ist für mich so unhygienisch, dass ich dort mein Obst und Gemüse niemals zubereiten würde!	hygienic conditi	no	no		no	no	Büro müsste näher zur Küche und Küche müsste hygienisch sein.	Distance	Hygienic conditions
Nein	no	no	no	Nein	no	no	Blender für Smoothies etc.	Accessibility	no
keine	no	no	no	keine	no	no	Die Möglichkeit mein Essen draußen mit gemütlichen Sitzgelegenheiten (z.B. Terasse) zu mir zu nehmen.	Workplacee Design	no
Nein	no	no	no	Nein	no	no	Sommer Terrasse mit Obst angebot	Workplacee Design	no
Prinzipiell nicht, man muss das Obst nur in den Bereich bringen	availability	no	no		no	no	Obstschalen bzw. kostenlose (Team-)individuelle Obstkörbe	availability	no
nein	no	no	no	nein	no	no	Alle Maßnahmen sind erfolglos da ich selten Obst und Gemüse esse.	Social Climate	no
	no	no	no	Nein - aber ich würde so oder so kein Obst oder rohes Gemüse essen...	no	no	eventuell eine saubere & aufgeräumte Küche in der Nähe	hygienic conditions	Workplacee Design
wenn es um die eigene Zubereitung geht, ja: häufig schmutzige Küchenzeile, schlechte Ausstattung (Messer, Teller, Spülmittel,...); Kantine: ok	hygienic conditi	Accessibility	no	nein	no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no		no	no
Nein	no	no	no	Nein	no	no	größerer Kühlschrank.	Accessibility	no
Kantine zu weit weg	distance	no	no	äh, ...	no	no	Kühlschrank, Geschirr und Besteck, helle Sitzgelegenheit	Accessibility	no
Zeit	time	no	no		no	no		no	no
Die Kantine ist zu weit entfernt	distance	no	no		no	no		no	no
	no	no	no		no	no	Bessere ausgestattete Küche	Accessibility	no
nein	no	no	no	nein	no	no	Transport und vorrausschauend Obst mitzunehmen erscheinen mir als das größte Hindernis. Sollte Obst jedoch auf der Arbeit zur Verfügung stehen würde ich das Angebot bestimmt nutzen.	availability	no
Nein.	no	no	no	Keine.	no	no	Keine, , Motivation zum Konsum von Obst/Gemüse muss vom MA kommen.	Social Climate	no
	no	no	no		no	no		no	no
Aufwend	accessibility	no	no	Nein	no	no	zur Verfügung gestellte Obstschalen am Arbeitsplatz	availability	no
Das Angebot beschränkt sich auf Äpfel und Bananen, die manchmal schon sehr reif sind. Die Gemüseauswahl zum Mittagessen und die Salatbar bzw. Salatcups sind gut. Manchmal ist jedoch das Gemüse - wenn gebraten - zu dürr.	Availability	no	no	nein	no	no	Es könnte in Kunden-Meetings Obst & Gemüse angeboten werden. Wenn wir healthy Nutrition verkaufen, dann sollte sich das auch darüber dokumentieren. Ich verlange aber nicht, dass mein Arbeitgeber mir kostenlos Obst und Gemüse zur Verfügung stellt.	availability	no
	no	no	no		no	no		no	no
	no	no	no		no	no	Zubereitungsutensilien (Blender), Ablageflächen, Sitzmöglichkeiten außerhalb des Schreibtisches	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no	Nein.	no	no		no	no
Keine Messer und Bretter in der Küche	Accessibility	no	no		no	no		no	no
nein	no	no	no	nein	no	no	keine	no	no
nein	no	no	no	nein	no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein.	no	no	no	Keine	no	no	Bereitstellung entsprechenden Geschirrs.	Accessibility	no
Nein	no	no	no	Nein	no	no	keine	no	no
Nein.	no	no	no	Küche, inkl Kühlschrank.	Accessibility	no	saubere und gepflegte Küche	hygienic conditions	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Obstteller steht manchmal zur Verfügung.	Free F&V products	no	Teller und Besteck neben dem Arbeitsplatz	Accessibility	no
nein	no	no	no	nein	no	no	Es wäre gut, wenn es Messer zum Obst und Gemüse schneiden in der Küche geben würde.	Accessibility	no
nein	no	no	no	nein	no	no	Obstkorb im Arbeitsbereich zur Verfügung stellen (Nudging)	availability	no
	no	no	no		no	no		no	no
	no	no	no	In der Küche ist immer ein kostenloser Obstkorb, aus dem sich jeder bedienen darf	Free F&V products	no	Das Equipment in der Küche muss zur Verügung gestellt werden, damit das Obst und Gemüse frisch verarbeitet werden kann	Accessibility	no
Nein	no	no	no	Kostenloser obstkorb	Free F&V products	no	Kostenloser gemüsekorb, bessere Ausstattung in der Küche zb messer und Schälgeräte	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no	Regelmäßiger Obstkorb in den Wintermonaten	no	no		no	no
Kein Pausenraum oder eine Möglichkeit zum Rückzug	Lounge missing	no	no	Leider nein.	no	no	Generell eine Küche anstatt einer kleinen Küchenzeile. Mehr Messer, Bettchen.	Accessibility	Accessibility
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no	Leider nein.	no	no	Die Küche sollte im Büro vorhanden sein, damit jederzeit etwas zubereitet werden kann. Bspw auch Müsli mit Obst. Weiterhin sollte die Küche auch gut ausgestattet sein.	Accessibility	no
	no	no	no		no	no		no	no
Eigentlich nicht. Lediglich macht es keinen Spaß alleine in der Küche einen Apfel zu essen, daher wird es aber nicht gemacht.	Social Climate	no	no	Nein.	no	no	Ein kleiner Bereich mit einem Stehtisch o.ä., wo man sich kurz mit Kollegen austauschen kann und an dem man dann auch "in Ruhe" essen kann und darf. Dort müsste dann lediglich ein wenig Geschirr und ein Schälmesser sein.	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
kein Obst/Gemüse vorhanden	availability	no	no	Pflanzen in den Büroräumen	Workplacee Design	no	Kühlschrank, Messer + Schneidebrett	Accessibility	no
Nein	no	no	no	Nein	no	no	Verbesserung der Sauberkeit in der Küche; - Bessere Ausstattung der Küche	hygienic conditions	Accessibility
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Bestellung Obstkörbe	Free F&V products	no		no	no

Nein	no	no	no	Nein	no	no	Keine Angabe	no	no
wenig Zeit ; - in Küche sind keine Geräte (Herdplatten, Mikrowelle…) zur Zubereitung oder zur Aufbewahrung on Speisen ; - kein Angebot an Obst und Gemüse (z.B. ganztägig verfügbar durch Automaten)	time	accessibility	availability	in der Kantine gibt es eine große Auswahl an Salaten, Säften…	Accessibility	no	bessere Ausstattung der Mitarbeiterküche; - Obstschalen ; - mehr Pflanzen (" grünes Umfeld ")	Accessibility	no
Nein.	no	no	no	Nein.	no	no	Keine.	no	no
keine Hürden	no	no	no	Obstkorb am Eingang / Rezeption	Free F&V products	no	keine	no	no
	no	no	no		no	no		no	no
In unserem Bereich haben wir Glück, da es eine kleine Küche zum Zubereiten von Salaten und Obst gibt. Diese wird auch sehr stark dafür benutzt.	no	no	no	Es gibt keine besonderen Arbeitsplatzbedingungen.	no	no	Ein Obstkorb in Bereich/Büro.	availability	no
	no	no	no	In der Natur, im Wald der neben der Firma ist	Workplacee Design	no		no	no
Keine Hürde. Jedoch auch kein gutes Angebot.	Availability	no	no	Nein. Aber auch nicht notwendig.	no	no	Hygiene und Ausstattung der Küchenzeile sollte verbessert werden.	hygienic conditions	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Küche zur Zubereitung inkl Kühlschrank	Accessibility	no
	no	no	no		no	no		no	no
es gibt keine Möglichkeit draußen zu essen, es gibt keine Möglichkeit im Grünen Pause zu machen. die Kantine groß und laut ist. ; ; Die Wände sind transparent, ständige Beobachtung. ; ; Es gibt einfach keine Möglichkeit sich mal ausreichend zu erholen und echte pausen zu machen ; Das frustriert und lässt alle hier mehr zu süßigkeiten greifen, was absolut schädlich ist. ; Wir wissen dass Süßigkeiten nicht gut sind, aber wir passen uns an.	Lounge missing; Outside eating	no		Möglichkeit in der Küche sich selbst etwas zuzubereiten. ; ; Das Unternehmen stellt Getränke und säfte her, für die Mitarbeiter gibt es aber keine Obst und Gemüse (soweit ich weiß auch nicht in der Produktion).	Accessibility	no	Obstkörbe, und Gemüse pro Woche (macht Firma Hevert auch schon und es funktioniert), wohingegen Döhler ein riesen Konzern, der sogar Säfte herstellt es nicht macht. ; Grünflächen zum spazieren gehen. ; kleinere Mensa. ; ; statt Süßigkeiten die die kollegen mitbringen, nüsse und Obst hinstellen	availability	no
Nein	no	no	no	Obst wird für die Mitarbeiter gratis bereitgestellt.	Free F&V products	no	Ist so ok wie es ist.	no	no
nein	no	no	no	nein	no	no	Freies Angebot von Obst und Gemüse in der Nähe des Arbeitsplatzes	availability	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Einmal pro Woche Obst gestellt bekommen	Free F&V products	no
Teilweise verbötte	rules	no	no	nein	no	no	Optik und Flair	Social Climate	no
	no	no	no	Täglich frischer Obstkorb in der Küche	Free F&V products	no		no	no
nein	no	no	no	nein	no	no	frisches gewaschenes Obst bereit zu stellen	availability	no
	no	no	no		no	no		no	no
Nein	no	no	no	Große Kaffeeküchen mit Arbeitsbereichen und Küchenutensilien	Accessibility	no	Z.B. In Meetings gar keine Kekse etc Bestellungen akzeptieren, sondern nur noch Obst.	availability	no
Nein	no	no	no	Ja, auf jeder Etage steht in den Küchen ein Obstkorb zur freien Verfügung	Free F&V products	no	alles gut, kein Änderungsbedarf	no	no
	no	no	no	Küchenzeile mit Waschbacken, Geschirr, Besteck	Accessibility	no		no	no
nein	no	no	no	nein	no	no	mehr Teller, Schüsseln, Messer	Accessibility	no
	no	no	no		no	no		no	no
Nein.	no	no	no	Nein.	no	no	Kein Großraumbüro; heißes Wasser in der Küche; Kollegen, welche die Küche sauber und aufgeräumt verlassen	Workplacee Design	hygienic conditions
Ja, keine ausreichenden Zubereitungsmöglichkeiten (Küche o.ä.).	Accessibility	no	no	Nein.	no	no	Gut ausgestattete Küchen, inkl. Herdplatten.	Accessibility	no
gläserne Büros sorgen dafür, das man sich permanent beobachtet fühlt und nicht möchte, das der Eindruck entsteht man würde die ganze Zeit Pause machen z.B. um Obst zu essen	Social Climate	no	no	nein	no	no		no	no
Keine Küche kein Platz	Accessibility	no	no	Nein	no	no	Mehr Angebot welches zu kaufen	availability	no
	no	no	no		no	no		no	no
nein	no	no	no	nein	no	no	Kostenloses Obstangebot; Ersatz von Keksen/ Snacks in Meetings durch Obst	Free F&V products	no
Nein	no	no	no	Ja	no	no	Küche	Accessibility	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Keine Zeit	time	no	no	Nein	no	no		no	no
Nein	no	no	no	Nein	no	no	Die Küche etwas besser ausstatten mit Messer und Brettchen, vielleicht ein mal im Monat einen kostenlosen Obstkorb für das gesamte Team bestellen	Accessibility	no
Ja, da ich erst in den Pausenraum gehen müsste um zu essen	Accessibility	no	no	Nein	no	no	Einen Kühlschrank, um die Sachen frisch zu halten	Accessibility	no
	no	no	no		no	no		no	no
Siehe Frage 54	accessibility	hygienic conditi	no	Nein	no	no	Ein neues Büro, in dem es einen Wasseranschluss in der Küche gibt.	Workplacee Design	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein ehr die Schokolade, die mich davon abhält	no	no	Nichts	no	no
Die Zeit, es selbst zuzubereiten. ; Ansonsten keine direkten Hürden. ; ; + Kein vorhandenes Obst/Gemüse - wenn ich nicht selbst daran denke, gibt es auch nichts	time	availability	no	Nein	no	no	Besseres Küchenequipment, um die verschiedensten Obst-/ Gemüsesorten zuzubereiten; ; + Bereitstellung eines Obstkorbes durch den AG	Accessibility	no
Nein	no	no	no	Nein	no	no	Aufklärungskampagne ; Einbindung in Kommunikation; Einführung BGM/BGF	communicatio n	no
nein	no	no	no	nein	no	no	modernere Küche, Schneidbrettchen, Obstschalen	Accessibility	no
nein	no	no	no	Jede Woche erhalten wir frisches Obst und Gemüse zum Verzehr und dieses wechselt regelmäßig nach den saisonalen Bedingungen	Free F&V products	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Küchenausstattung zu optimieren, z.B. Mixer bereitstellen, Smoothies anbieten bzw. Obstabo einführen	Accessibility	no
Nein	no	no	no	Nein	no	no		no	no
nein	no	no	no		no	no		no	no
Nein, räumlich alles i.O. Es mangelt an der Zeit, da ich häufig gar keine Pause mache oder nur sehr kurz, so dass die Zeit nicht ausreicht, um Gemüse/Obst zu zubereiten.	time	no	no	Nein.	no	no	Alles vorhanden.	no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
	no	no	no		no	no		no	no
Nein	no	no	no	Nein	no	no	Großer Obstkorb an präsenter Stelle	availability	no
Keine	no	no	no	Keine	no	no	Keine	no	no
Es gibt keinen Aufenthaltsraum	Lounge missing	no	no		no	no	Voll eingerichtete Küche mit Herd und Ofen	Accessibility	no
Nein, nur ein paar Schritte entfernt steht Obst (weniger Gemüse) immer Bereit zum Naschen oder Verarbeiten da.	no	no	no	Nein.	no	no	Keine, ich benötige nicht viel. Ein Apfel liegt da und in den beißt man direkt rein.	availability	no
	no	no	no		no	no		no	no
	364	435	449		412	449		274	439
	88				40			178	

E 6

59. Welche Maßnahme würden Sie speziell für die Bedingungen des psychosozialen Arbeitsplatzes empfehlen, die Ihren Obst- und Gemüsekonsum beeinflussen?	Code 1	Code 2	Code 3	60. Gibt es andere Unterstützung, die Sie sich von Ihrem Arbeitgeber wünschen, damit Sie während der Arbeit mehr Obst- und Gemüse essen?	Code 1	Code 2	Code 3
	no	no	no		no	no	no
	no	no	no		no	no	no
Nährwertangaben zu Obst und Gemüse.; Nachrichten über die gesundheitlichen Auswirkungen des Obst- und Gemüsekonsums.	Communication	no	no	Angebot in der Kantine von Vollkomprodukten in Kombination mit Gemüse und Saisonobst	Accessibility	no	no
Gemeinsame Pause	Social Climate	no	no	Vielfältigeres Angebot	Accessibility	no	no
Obst in Besprechungen anbieten.	Availability	no	no	Obst in Besprechungen anbieten.	Availability	no	no
	no	no	no		no	no	no
	no	no	no	Kostenlose Bereitstellung von Obst.	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Nein	no	no	no
Keine	no	no	no	Nein, es liegt ja nur an der eigenen Einstellung. Zubereitung kostet Zeit und man muss selbst priorisieren, dass man sich Zeit für die Zubereitung nimmt.; Und man muss morgens schon daran denken, sich etwas mitzunehmen (außer der Arbeitgeber stellt jeden Tag Obst und Gemüse zur Verfügung)	Social Climate	no	no
	no	no	no		no	no	no
	no	no	no	Kostenlose Obstkörbe in jeder Abteilung	Free F&V products	no	no
	no	no	no	Eine Schale Obst in der Küche	Availability	no	no
	no	no	no		no	no	no
Einen Chef der diese "Obstkultur" vorlebt und andere Personen animiert/motiviert daran teilzunehmen	Social Climate	no	no	Nein	no	no	no
	no	no	no		no	no	no
na	no	no	no	na	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Nein	no	no	no
	no	no	no		no	no	no
Ich weiß es nicht	no	no	no	Besseres Angebot in den Kantinen- oder Fruchtkörben	Accessibility	no	no
Dass man Obst und Gemüse zur Verfügung gestellt bekommt	availability	no	no	Obst und Gemüse, welches zur Verfügung gestellt wird	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Gesunde Ernährung als Gesprächsthema	Communication	no	no	Kostenloses zur Verfügung stellen von Obst und Gemüse	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Größere Küchen um gemeinsames zubereiten zu ermöglichen	Joined cooking	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Bereitstellung von Obst und Gemüse	Availability	no	no
	no	no	no		no	no	no
Der Konsum kommt rein auf mich an und hat nichts mit der zwischen-menschlichen Beziehung zu tun	Social Climate	no	no	frei verfügbares Obst vom Arbeitgeber und ich würde mehr Obst konsumieren	Free F&V products	no	no
In längeren Meetings Gemüse mit Dips anbieten oder mundgerechtes Obst, frisch und bunt zubereitet (z.B. Spieße)	Availability	Accessibility	no	z.B. Kostenübernahme des Obst- und Gemüseeinkaufs; - Bereitstellung von frischem Obstsalat; - Gemeinsames Mittagessen zu Obst und Gemüse	Free F&V products	Availability	Social Climate
Zur Verfügungsstellung eines Obstkorbes in der Gemeinschaftsküche oder ein gemeinsames, gesundes Frühstück einmal im Quartal	Joined cooking	Availability	no		no	no	no
	no	no	no		no	no	no
Bereitstellung von Obst und Gemüse durch den Arbeitgeber, Toleranz zu kurzweiligen Pausen zur Verspeisung von Obst	Availability	Social Climate	no	siehe vorherige Antworten	Accessibility	Availability	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Keine	no	no	no	Das Angebot und die Vielfalt erhöhen	Availability	no	no
keine	no	no	no	nein	no	no	no
keine	no	no	no	Nein	no	no	no
Keine	no	no	no	Kostenfreie Obstkörbe in der Kantine / Büro mit unterschiedlichsten Frucht- und Gemüsesorten und nicht nur Standard (bspw. Äpfel) sondern auch ausgefallene / exotische Sorten	Free F&V products	Availability	no
	no	no	no		no	no	no
Gemeinsame Frühstückspause mit den Kollegen und frischem Obst	Social Climate	no	no	Anderes Obst als Äpfel am Donnerstag	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Austausch zum Thema gesunde Ernährung findet in der Kaffeeküche statt.	Communication	no	no	Nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Keine	no	no	no	Keine	no	no	no
	no	no	no		no	no	no
Keine	no	no	no	Nein	no	no	no
Kostenloses Obst anbieten, in Meetings Obststatt Kekse reichen	Free F&V prod.	Availability	no	Nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Erinnerungen untereinander. ggf. "Obst-Holdienst"	Communication	no	no	verschiedene Zubereitungsmöglichkeiten (Smoothie-Maker, Saftpresse, etc.)	Accessibility	no	no
	no	no	no		no	no	no
Was?	no	no	no	Nein	no	no	no
	no	no	no	Nicht notwendig.	no	no	no
	no	no	no		no	no	no
	no	no	no	Obstkorb verfügbar machen. Gibt es kaum, und wenn dann nur 2x pro Woche und ist auch schnell leer.	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Erinnerung im Intranet mit schönen/lustigen Beiträgen	Communication	no	no

F 1

	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Obstkorb täglich, und auch Gemüse zur Auswahl; in der Kantine mehr Gemüse zur Auswahl und eine günstigere Salatbar (Salat im Vgl zu Hauptgerichten extrem teuer)	Availability	Accessibility	no
	no	no	no		no	no	no
	no	no	no		no	no	no
weniger Störungen und Unterbrechungen	Social Climate	no	no	mehr Platz pro Mitarbeiter, weniger Störungen, die ein konzentrierteres Arbeiten ermöglichen, so dass kurze Pausen überhaupt erst möglich werden	Accessibility	Social Climate	no
	no	no	no	Obst- und Gemüseschalen, die kostenlos zur Verfügung gestellt werden. Andere Unternehmen bieten dies an.	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Dekoration, bspw. bunte Wandbemalungen (siehe Alnatura Konzept) oder Pflanzen, Obstkörbe in allen Meetingräumen oder diversen Stellen im Gebäude (Empfang).	Workplace Design	no	no		no	no	no
	no	no	no	Kostenlose Bereitstellung von Obst	Free F&V products	no	no
	no	no	no		no	no	no
keine weiteren Maßnahmen nötig	no	no	no	Nein	no	no	no
wenn generell mehr Obst gegessen werden würde	Availability	no	no	Obstkorb zur Verfügung stellen	Availability	no	no
	no	no	no	größeres Angebot in Kantine	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
täglich frische und ansprechende Obstkörbe	Availability	no	no	Kostenloses Obst	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	kostenloses Obst und Gemüse zur Verfügung stellen	Free F&V products	no	no
	no	no	no		no	no	no
m. E. beeinflusst das nicht meine Speiseauswahl	no	no	no	Gemüsesticks in der Kantine, fertig zubereitet als Nachmittagssnack.	Availability	Accessibility	no
mehr Gespräche über gesundheitsbewusste Ernährung mit Obst/Gemüse	Communication	no	no	kostenfreies Obstangebot; "Snackstationen" um weite Laufwege zu vermeiden	Free F&V products	Distance	no
Mehr Pflanzen. Mehr Grün	Workplace Design	no	no	Obst und Gemüse stellen	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Keine Besonderen	no	no	no	Obstschalen in den Meeting areas oder Büros, Brettchen und Messer zur Verfügung	Availability	Accessibility	no
	no	no	no	Nein	no	no	no
Frühstückspause in der Küche mit Obstkonsum	Social Climate	no	no	Obst und Gemüse vom Arbeitgeber zur Verfügung stellen	Availability	no	no
	no	no	no	nein	no	no	no
	no	no	no		no	no	no
Keine Änderung notwendig	no	no	no	Keine Änderung notwendig	no	no	no
Aufenthaltsräume	Lounge Missing	no	no	kostenloses Obst für alle Mitarbeiter	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	den Süßigkeitenautomaten abschaffen bzw. mit gesünderen Alternative bestücken	Availability	no	no
Keinerlei Maßnahmen. In meinem Büro und bei meinen Kollegen können wir immer Obst und Gemüse essen. Die zwischenmenschliche Beziehung hat keinerlei Einfluss.	Social Climate	no	no	Obst während Meetings bereitstellen.; Obstkorb in Kantine und an Empfang bereitstellen für kostenlosen Verzehr und regelmäßigem Nachschleg. Wir sind viele Mitarbeiter.	Free F&V products	Availability	no
	no	no	no		no	no	no
ich esse überdurchschnittlich viel Obst und Gemüse, ich sehe keinen Anlass meinen Konsum noch zu erweitern	no	no	no	Ein Aufenthaltsraum mit Teeküche, Tischen und Stühlen wäre hier sehr hilfreich. Aber bei dem aktuellen Raummangel wird das ein Wunschtraum bleiben	Lounge Missing	no	no
	no	no	no	Gratis Obst	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
none	no	no	no	When the Agenda of the day is filled With 8-10 times 1 hour Meeting it is not easy to find the "time" to consume fruit. ; Cantine meals contains big Portion of meat and carbohydrates. Vegetable only as a Salat or sometimes boiled.	Accessibility	Time	no
	no	no	no		no	no	no
es wäre allegut wenn es weniger stinken würde	Hygienic condit	no	no	Freie Obst und Gemüse	Free F&V products	no	no
	no	no	no	preisgünstige Auswahl an Früchten in der Kantine / evtl. Bereitstellung von Früchten pro Stockwerk / Abteilung	Availability	Accessibility	Free F&V products
	no	no	no	Subvention von Obst und Gemüse in der Kantine wäre eine Möglichkeit.	Accessibility	no	no
	no	no	no		no	no	no
Keine	no	no	no	Ein Angebot des Arbeitgebers würde es einfacher und variabler machen.	Availability	no	no
	no	no	no		no	no	no
	no	no	no	Bereitstellung von frische Obst Gemüse Korb im Küche Bereich	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
s. Frage 58	Free F&V products	no	no	nein	no	no	no
	no	no	no		no	no	no
keine	no	no	no	nein	no	no	no
	no	no	no		no	no	no
es liegt sicherlich nicht an den zwischen-menschlichen Beziehungen, dass zu wenig Obst und Gemüse konsumiert wird.	Social Climate	no	no	kostenloses Angebot an Obst und Gemüse zum snacken, verfügbar in allen Team-Büros.	Availability	Free F&V products	no
	no	no	no		no	no	no
Den oder die Kollegen anzusprechen ob sie heute schon Obst oder Gemüse zu sich genommen haben.	Social Climate	no	no	Die Teeküchen der Etagen mit Obst bestücken und alle Arbeitnehmern mit Hinweisschilder darauf aufmerksam machen.	Availability	Communication	no
	no	no	no		no	no	no
	no	no	no	kostenfreier Obstkorb für die Abteilungen. Oft habe ich erst Nachmittags Lust auf Obst, da hat aber die Kantine schon zu	Free F&V products	Availability	no
Obst kostenfrei und attraktiv anbieten	Free F&V produ	no	no	Obst kostenfrei und attraktiv anbieten	Free F&V products	Availability	no

F 2

	no	no	no		no	no	no
keine	no	no	no	nein, das ist vor allem mein Thema	Social Climate	no	no
Gemeinsamer Obstkorb im Team	Availability	no	no	Kostenloses Angebot an Obst	Free F&V products	no	no
	no	no	no	Obstkorb	Availability	no	no
Aufenthaltsraum mit einem Korb Obst und Gemüse	Availability	no	no	nein	no	no	no
	no	no	no		no	no	no
Bewirtung am Platz	Accessibility	no	no	Bewirtung am Platz	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
gute Arbeitsatmosphäre zwischen Mitarbeitern, Vorgesetzten und Arbeitgeber	Social Climate	no	no		no	no	no
	no	no	no	Bessere & saubere Küchen, Pausenräume zum Essen der frisch zubereiteten Mahlzeiten	Hygienic conditions	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Obstkörbe	Availability	no	no
	no	no	no		no	no	no
	no	no	no	In Meetings anstelle Keksen Obst oder Gemüse anbieten	Availability	no	no
	no	no	no		no	no	no
Gleichgesinnte	Social Climate	no	no	kostenfreies Angebot	Free F&V products	no	no
	no	no	no	Ja, Obst und Gemüse wird einmal pro Woche/zweimal im Monat vom Arbeitgeber angeboten.	no	no	no
	no	no	no	kostenloses, saisonales Obst und/ oder Gemüse (Bio-Qualität), welches den Mitarbeitern zur Verfügung steht	Free F&V products	Accessibility	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Weniger Stress	Social Climate	no	no	Zugang zu Obst und Gemüse am Arbeitsplatz ; Ein besseres Angebot in der Kantine, von Obst und Gemüse.	Accessibility	Accessibility	no
Ein Korb mit frischem Obst oder Säften im Büro	Availability	no	no	saubere Küchen, mehr Sauberkeit in den Büros	Hygienic conditions	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	saubere Küche	Hygienic conditions	no	no
	no	no	no		no	no	no
Obst könnte vom Arbeitgeber angeboten werden in Form von Obstschalen in den Küchen oder Büros ; gleiches gilt für Saft, wo wir doch einer der größten Hersteller sind!	Availability	no	no	Nein, ich kümmere mich selbst um meine gesunde Versorgung. Aber ein Sportangebot vom Arbeitgeber wäre toll - dafür sieht man die Notwendigkeit aber nicht. ich würde sagen 60% der Kollegen leiden unter Rückenprobleme, mE müsste man hier ansetzen. Gesunde Ernährung und Bewegung (evtl Angebot in der Pause).	Sport offerings	no	no
	no	no	no		no	no	no
Teilweise wird man schief angeschaut, wenn man Obst bzw. Gemüse konsumiert. Die Akzeptanz ist nicht bei allen gegeben. Teilweise ist auch eine Art "Neid" zu erkennen, dass andere sich gesünder ernähren.	Social Climate	no	no	In den Küchen Obst- und Gemüsekörbe	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Kollegen sollten die Küche immer sauber hinterlassen, was oft nicht der Fall ist	Hygienic condit	no	no	kostenloses Angebot von Obst und Gemüse	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
keine speziellen	no	no	no	kleine Obstkörbe für die Teams	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
siehe 58.	Workplace Design	no	no		no	no	no
eine volle Obstschale in jede Abteilung :-) und eine Erinnerung per email	Availability	Communication	no	vielleicht dass sie uns mehr über neue Obst Sorten informieren.. so als neue Entdeckung	Communication	no	no
Aufstellen von Obstkörben.	Availability	no	no	Die Förderung dessen.	Communication	no	no
	no	no	no		no	no	no
	no	no	no	Obst und Gemüse kostenlos zur Verfügung stellen.	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no	angenehmes Klima in der Kantine, besseres Preis-Leistungsverhältnis für den Erwerb von Obst/ Gemüse,; Schaffung von Ruhezonen in welchen entspannt eine Obst/ Gemüse Pause eingelegt werden kann	Social Climate	Accessibility	Lounge Missing
Gegenseitige Motivation der Kollegen ; ; Information über Vitamine etc von Obst und Gemüse im Vergleich untereinander sowie zu Schokolade und Co	Social Climate	Communication	no	Bereitstellung von Obstkörben (free)	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Angebot Kantine verbessern, Vollwert- und Biostatt Massenfastfood	Accessibility	no	no
	no	no	no	Kostenloses Obst/Gemüse-Angebot in Kantine (Snack-Größe)	Free F&V products	no	no
jeder bereitet mal etwas für alle zu	Social Climate	no	no	Bereitstellung von frischem Obst und Gemüse	Availability	no	no
keine wirklich bekannt	no	no	no	bis auf die genannte, nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Obstkorb oder verbessertes Angebot an mehr Obst und Gemüse.	Availability	no	no	s.o.	no	no	no
Schulungen über Ernährung am Arbeitsplatz.	Communication	no	no	Schulungen	Communication	no	no
Keine überfüllten Großraumbüros	Accessibility	no	no	Wechselndes Angebot an Obst und Gemüse	Availability	no	no
Mehr Thematisierung durch AG, dadurch auch unter den Kollegen folglich	Communication	no	no	Nein	no	no	no
Angebote von Obst in Meetings bzw. auf den Fluren	Availability	no	no	Bereitstellen von Obstkörben	Availability	no	no
	no	no	no	nein	no	no	no
	no	no	no	Anlaufstellen mit Obstkörben in den Büros	Availability	no	no

F 3

	no	no	no		no	no	no
	no	no	no	kostenloses Obst	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
keine	no	no	no	nein	no	no	no
kollegial Support und Vorbilder helfen immer.	Social Climate	no	no	Besser Auswahl in der Kantine.	Availability	no	no
k.A	no	no	no	kA	no	no	no
keine	no	no	no	nein	no	no	no
Ist ausreichend	no	no	no	Kostenlose Bereitstellung von Obst	Free F&V products	no	no
Wir schauen immer was der anderes isst und lassen uns inspirieren, das Betrifft auch Obst und Gemüse.	Social Climate	no	no	Gpf. einen Obstkorb pro Abteilung und/oder Smoothies.	Availability	no	no
	no	no	no		no	no	no
Plakate von Obst und Gemüse im Büro und in der Kantine,; Obstangebot nicht nur auf Kantine beschränken (kleine Obstkörbe aufstellen); Präsenz und Verfügbarkeit	Workplacee De	no	no	Präsenz (aufstellen von Gemüse- und Obstkörben) Obst und Gemüse steht kostenlos zur Verfügung bzw. Subventionierung des Obst und Gemüsepreises	Availability	Accessibility	no
Firmeninterne Anregungen schaffen, z.B. durch Kommunikation eines täglichen Obst-/Gemüsekonsums. Gegebenenfalls können entsprechende Poster/Informationstafeln intern dazu anregen, mehr Obst/Gemüse zu essen	Communication	Availability	no	Bereitstellung einer täglichen Auswahl an Obst/Gemüse, die von den Mitarbeitern kostenlos genutzt werden können	Availability	no	no
Angebot vergrößern	Availability	no	no	nein	no	no	no
	no	no	no	Besseres und ansprechenderes Obstangebot in der Kantine. Wenn möglich auch im Neubau.	Availability	no	no
Keine	no	no	no	Die Bereitstellung kostenloser Obstkörbe	Free F&V products	no	no
	no	no	no		no	no	no
Snacks	Availability	no	no	Gratis Obst!	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
errichten einer Kaffeeküche für die Abteilung	Accessibility	no	no	Nein	no	no	no
Gemeinsam verschiedene Challenges + gegenseitige Kontrolle bzw. Ermutigung	Social Climate	no	no	Bereitgestelltes Obst/Gemüse, besseres Sortiment in der Kantine bzw. Möglichkeit dort Ananas in Stücken etc. günstig zu kaufen	Availability	Accessibility	no
Gegenseitiges anregen?unterstützen mehr Obst und Gemüse zu essen. Schale mit Obst und Gemüse im Büro anstatt von Schokolade, Weingummis, Keksen etc.	Social Climate	no	no	Schale mit Obst und Gemüse in den Küchen für die Mitarbeiter	Availability	no	no
k. A.	no	no	no	Aufsteller beim Arbeitsbreich mit Bildern von Gemüse oder Obst; Wenn von der Firma Obstkörbe in der Abteilung aufgestellt werden	Workplacee Design	no	no
	no	no	no		no	no	no
	no	no	no	In der Kantine mehr Auswahl an Obst	Accessibility	no	no
	no	no	no	Gemüse gibt es eigentlich immer in der Kantine. Das einzige was den Obstkonsum anregen könnte, wären frei zugängliche Obstkörbe in den einzelnen Abteilungen.	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
besseres arbeitsklima und nicht stuhl an stuhl sitzen	Social Climate	no	no		no	no	no
z. B. gemeinsame Obstschale regt dazu an sherzuzugreifen	Availability	no	no	Kostenlose Bereitstellung von Obst + Gemüse an manchen Stellen im Gebäude (bisdang nur im Bereich der GF vorhanden)	Free F&V products	no	no
	no	no	no		no	no	no
ich würde Obst nicht kostenlos anbieten, aber günstiger (subventioniert) als auf dem Markt außerhalb.	Accessibility	no	no	Finanziellen Anreiz indem man es subventioniert und bei Meetings kostenlos anbietet.	Accessibility	Free F&V products	no
	no	no	no		no	no	no
Keins, meine Kolleginnen essen viel Obst und Gemüse.	no	no	no	Ein sauberes Kühlschrank und Mikrowelle.	Hygienic conditions	no	no
	no	no	no		no	no	no
Keine Maßnahme. Jeder Mensch ist unterschiedlich.	Social Climate	no	no	Bereitstellung von kostenlosen Bio-Obstkörben. Bezuschussung des Kantinenessens und eine deutlich bessere Produktqualität der Speisen.	Accessibility	Accessibility	Availability
	no	no	no		no	no	no
Mehr Zeit; also die Zeit um das Obst vorzubereiten. ; Gegessen wird dann während der Arbeit, Snnvoll?	Time	no	no	Statt Keksen, Obst in Besprechungsräumen oder an Meeting Points...	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Nichts, alles ist gut.	no	no	no	Nichts, alles ist gut.	no	no	no
	no	no	no	Kostenloses Obst	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Einen zentralen Punkt im Raum zum Austauschen mit Kollegen, zum pausieren, snacken,...	Lounge Missing	no	no		no	no	no
Sehe hier aktuell nichts.	no	no	no	Der Arbeitgeber könnte mehr convienente Produkte an Obst & Gemüse in der Kantine anbieten.	Accessibility	no	no
Gemeinsame gemütliche Flächen für Getränke- und Essensverzehr.	Lounge Missing	no	no	Kostenlosen Obst- und Gemüsekorb.	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Vorgesetzten sensibilisieren	Social Climate	no	no	Vorgesetzten sensibilisieren	Social Climate	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
mehr Platz	Accessibility	no	no	nein	no	no	no
	no	no	no		no	no	no
größere Auswahl und vllt auch günstiger	Availability	Accessibility	no	nein	no	no	no
	no	no	no	Mehr frisches & günstiges Obst und Gemüse in der Kantine.	Availability	no	no
nein	no	no	no	nein	no	no	no
wenn die anderen auch mehr essen würden	Social Climate	no	no	Ein Obstkorb in der Teeküche	Availability	no	no
	no	no	no		no	no	no
Kollegen die ernährungsbewusst/ sportbewusst Leben regen zum Austausch und umdenken an ; ; - Schulungen der Mitarbeiter (freiwillig)	Social Climate	Communication	no	Nein; ; Ich finde eine gesunde Ernährungsweise hängt von jeder Person selber ab und ist ein persönliches Thema.	Social Climate	no	no
	no	no	no		no	no	no
keine	no	no	no	nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no

F 4

keine	no	no	no	Ein besseres ausgewogenes Angebot in der Kantine oder an anderen Stellen im Unternehmen.	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Ich weiß es nicht.	no	no	no	Wie bei Frage 56.	Rules	no	no
	no	no	no		no	no	no
	no	no	no	Angebot von vielleicht auch mehr Produkten, die Döhler selbst herstellt (Pürees, Smoothies…)	Availability	no	no
	no	no	no		no	no	no
	no	no	no	Bessere Präsentation und Werbung des angebotenen Obst.; Aktueller Zustand --> kleiner Korb mit zu wenig Auswahl der neben der Kasse in der Kantine steht.	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Obstkorb am Empfang	Availability	no	no
	no	no	no	Obstkorb	Availability	no	no
	no	no	no	sollte überall stehen um so niederschwellig wie möglich den Konsum zu fördern	Availability	no	no
	no	no	no	Reminder, "heute schon Obst/Gemüse gegessen"… ebenso, "Ruhe mal deine Augen aus"…	Communicatio n	no	no
Infoplakate/Kampagne zum Thema gesunde Ernährung	Communication	no	no	Obst sollte durch den Arbeitgeber kostenlos bereitgestellt werden	Free F&V products	no	no
	no	no	no		no	no	no
Obstkonsum als "Teammeeting"	Social Climate	no	no		no	no	no
	no	no	no	Nein	no	no	no
keine	no	no	no	nein	no	no	no
	no	no	no	Nein	no	no	no
	no	no	no	Kostenloses Obstangebot	Free F&V products	no	no
Alle Maßnahmen sind erfolglos da ich selten Obst und Gemüse esse.	Social Climate	no	no	Alle Maßnahmen sind erfolglos da ich selten Obst und Gemüse esse.	Social Climate	no	no
	no	no	no	Wenn während interner Meetings aufgeschnittenes Obst zur Verfügung stehen würde würde ich eventuell auch Obst essen - Problem: Hygiene	Hygienic conditions	Free F&V products	no
saubere Küchen, gute Ausstattung, Obstkörbe zur Selbstbedienung	Hygienic condit	Availability	Accessibility	kostenlose Obstkörbe	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
keine	no	no	no	nein	no	no	no
Gemeinsame kurze Pause	no	no	no	Saisonale Angebote	Availability	no	no
	no	no	no	Mehr Gemüse / Obst dem AN zur Verfügung stellen	AVailability	no	no
	no	no	no	Essen am Schreibtisch erlauben	Rules	no	no
	no	no	no		no	no	no
Vielleicht Gruppenzwang.	Social Climate	no	no	Frei verfügbares und kostenloses/-günstiges Obst würde da sicherlich am meisten helfen.	Free F&V products	Accessibility	no
keine.	no	no	no	Nein.; ; Siehe Frage 58.	Social Climate	no	no
	no	no	no		no	no	no
	no	no	no	Nein	no	no	no
Gemeinsam Obst und Gemüse im Wechsel einkaufen und gemeinsam zubereiten und konsumieren in der Mittagspause/nachmittags.	Social Climate	no	no	Aktionswochen in der Kantine	Accessibility	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Austauschmöglichkeiten unter Mitarbeitern	Social Climate	no	no	nein	no	no	no
keine Idee	no	no	no	besseres und preislich attraktives Angebot in der Kantine	Accessibility	no	no
	no	no	no	verfügbarkeit um sonst	Free F&V products	no	no
	no	no	no	Mehr Information über saisonale und regionale Angebote, z.B. Zusammensetzung und Vitamin- bzw. Mineralstoffgehalt.	Communicatio n	no	no
	no	no	no		no	no	no
Keine Idee.	no	no	no	Ebenfalls fällt mir hierzu leider nichts ein.	no	no	no
Keine	no	no	no	Keine	no	no	no
	no	no	no	Kostenloses Angebot, mehr Angebot: ähnlich wie Low Carb Woche auch Gemüse- und Obstwochen anbieten	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Nicht.	no	no	no	Nein	no	no	no
keine	no	no	no	Es gibt in manchen Firmen Obst als Snack umsonst. Dies ist bei uns leider nicht der Fall.	Free F&V products	no	no
	no	no	no	Kantine könnte Gemüsesticks mit Dip anbieten	Accessibility	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Feste Pausenzeiten und Pausensäume, damit auch zwischenmenschlich agiert werden kann.	Social Climate	no	no	Feste Pausenzeiten und Pausensäume, damit auch zwischenmenschlich agiert werden kann.	Lounge Missing	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Ich würde es gut finden, wenn sich alle Kollegen dazu entschließen, sich gesund zu ernähren da mir es einem selbst leichter fällt.	Social Climate	no	no	Uns Mitarbeiter zu sensibilisieren, dass Obst und Gemüse wichtig sind und evtl die Gesundheit auch positiv beeinflussen. Weiterhin könnte der Arbeitgeber kostenlos Obst und Gemüse zur Verfügung stellen. Immerhin wird es mit dem Wasser auch so gemacht.	Communicatio n	Free F&V products	no
	no	no	no		no	no	no
Obst gemeinsam im Austausch mit Kollegen essen. Kurze Pause von der Arbeit gemeinsam.	Social Climate	no	no	Obstkorb vom Arbeitgeber gestellt bekommen. Aber bitte Obst und Gemüse aus der Region.	Free F&V products	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Befürwortung von Obst, Hervorheben der Vorteile	Communication	no	no	Gesundheitschecks, um auf Gesundheitsvorteile durch ausgewogene Ernährung hinzuweisen	Health checks	Communicatio n	no
keine	no	no	no	Nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Nein	no	no	no

F 5

Keine Angabe	no	no	no	Obst und Gemüse kostenfrei anbieten	Free F&V products	no	no
andere Mitarbeiter essen häufig Obst & Gemüse	Social Climate	no	no	gratis Angebot von Obst & Gemüse ; - großes und v.a. preiswertes Angebot von Obst & Gemüse in der Kantine (z.B. Smoothies)	Free F&V products	no	no
Keine	no	no	no	Bereitstellung von Obst oder Gemüse in der Küche.	Availability	no	no
ausreichendes Angebot (nicht nur in den frühen Morgenstunden) wünschenswert; Kollegen nehmen sich in den frühen Morgenstunden viel Obst/das beste, so dass ab ca. 8.30 Uhr nicht mehr übrig ist	Availability	no	no	weniger Meetings	Time	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Keine Maßnahmen notwendig.	no	no	no	Kostenloses Obst bzw. Gemüse als Rohkost in der Kantine wäre wünschenswert. Optional auch auf Abteilungsebene. Abteilungsleiter könnte hiera uf Kostenstelle abrechnen.	Free F&V products	Social Climate	no
	no	no	no		no	no	no
Keine	no	no	no	Nein	no	no	no
	no	no	no		no	no	no
Vorbildfunktion der Vorgesetzten: endlich damit aufhören sich kaputt zu arbeiten, die Manager bleiben so viele Stunden, da denkt man als Angestellter natürlich ich müsste auch so lange bleiben. Nein, jeder hat nur eine andere Aufgabe. ; ; Ehrlichkeit fördern, Selbstverantwortung fördern, ; Aufklärung betreiben über welche schäden Zucker macht. ; Geht aber in diesem Unternehmen kaum, weil sie auch Energiedrinks verkaufen, wäre ja dann gegen die eigenen Produkte. ; Aber die Kollegen um mich auf Management Ebene, die essen auch größtenteils bio und nichts vom diskounter.	Social Climate	no	no		no	no	no
Mehr Auswahl	Availability	no	no	Nein	no	no	no
	no	no	no	Ausgestattete Küchenräume zur Zubereitung	Accessibility	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Optik und Flair	Accessibility	no	no	nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Mehr Obstverkauf in der Kantine	Availability	no	no
	no	no	no	nein	no	no	no
	no	no	no		no	no	no
kleine Auszeiten würden das gemeinsame Essen von Obst fördern	Social Climate	no	no	Obstkörbe in den Bürotrakten	Availability	no	no
	no	no	no		no	no	no
kein Großraumbüro	Accessibility	no	no	Umdenken in der Kantine, d.h. das verschiedene Gemüsesorten zum Essen angeboten werden, welche nicht zu 50% aus Zwiebeln bestehen.	Accessibility	no	no
Anregungen zum gemeinsamen Verzehr von Obst und Gemüse, z.B. gemeinsames Frühstück oder Mittagessen unterstützt vom Unternehmen.	Communication	no	no	Verbessertes Kantinenangebot mit höherem Gemüseanteil. Insbesondere die vegetarischen Optionen in der Kantine sollten attraktiver und gesünder gestaltet werden (aktuell beinhalten vegetarische Optionen oft Unmengen an Käse und Sahne etc). ; kostenlose Obst- und Gemüsekörbe für alle Unternehmensbereiche.	Accessibility	no	no
mehr Toleranz zwischen den Kollegen, das kleinere Pausen auch akzeptiert sind und nicht unterschwellig als "faul sein" interpretiert werden. Dieses Prinzip muss jedoch erst einmal durch die Vorgesetzten vorgelebt werden.	Social Climate	Social Climate	no	Obstkörbe in allen Abteilungen bereit stellen, nicht nur in den Chefetagen	Availability	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
kleine	no	no	no	nein	no	no	no
andere auch konsumieren	Social Climate	no	no	Nein	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no	Vielleicht offener kommunizieren, dass es okay ist, am Arbeitsplatz zu essen. Es ist nicht direkt verboten, aber man hat schonmal gehört, dass es von der Geschäftsleitung Stress gab, wenn man am PC aß	Communication	no	no
Weiß nicht	no	no	no	Nein	no	no	no
	no	no	no		no	no	no
	no	no	no	Es wäre toll, wenn mein AG frisch geschnittenes Obst und Gemüse in die Küche oder an meinem Platz stellt.	Accessibility	no	no
	no	no	no		no	no	no
Keine	no	no	no	Nein	no	no	no
Keine	no	no	no	Einen Obstkorb	Availability	no	no
Obst- und Gemüse"challenge"	Social Climate	no	no	Einfache Darreichung von Portionen	Accessibility	no	no
gratis Obstkörbe von der Familie	Free F&V produ	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Obsttheke, Obst in Meetingräumen	Availability	no	no	Nein	no	no	no
	no	no	no	Kostenloses Obst und Gemüse anbieten	Free F&V products	no	no
	no	no	no		no	no	no
Obst/Gemüse sollte frei verfügbar sein (gerne gegen Kostenbeitrag), so dass es selbstverständlich ist, dies zu verzehren.	Availability	no	no	Nein.	no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
	no	no	no		no	no	no
Poster/Plakate über die Vorteile	Communication	no	no	Gratis Obst präsent mit Zusatzinfos. Allerdings: Nachfrage von Arbeitnehmerseite bislang auch gering. Wird viel gefordert und viel für Mitarbeiter gemacht, Obst wurde bislang noch nie erwähnt (Mitarbeiteranzahl: 10)	Availability	Communication	no
Keine	no	no	no	Keine	no	no	no
Gemeinsames Kochen	Social Climate	no	no	Bessere Ausstattung	Accessibility	no	no
	no	no	no	Eine größere Auswahl vermutlich. Die ist aber bereits "in Arbeit"	Availability	no	no
	no	no	no		no	no	no
	355	441	451		302	424	448
	97				150		

F 6

Appendix 14 - Additional Qualitative Insights

IBM SPSS Web Report - Qualitative data - updated 2.spv

Log

Log - Log - August 24, 2020

```
CROSSTABS
  /TABLES=Age sex OrPo FVI BY Free HygCon
  /FORMAT=AVALUE TABLES
  /CELLS=COUNT
  /COUNT ROUND CELL.
```

Crosstabs

Crosstabs - Case Processing Summary - August 24, 2020

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Free F&V products	401	88,7%	51	11,3%	452	100,0%
Age * Hygienic conditions	401	88,7%	51	11,3%	452	100,0%
Sex * Free F&V products	401	88,7%	51	11,3%	452	100,0%
Sex * Hygienic conditions	401	88,7%	51	11,3%	452	100,0%
Organizational Position * Free F&V products	400	88,5%	52	11,5%	452	100,0%
Organizational Position * Hygienic conditions	400	88,5%	52	11,5%	452	100,0%
F&V Intake * Free F&V products	395	87,4%	57	12,6%	452	100,0%
F&V Intake * Hygienic conditions	395	87,4%	57	12,6%	452	100,0%

Crosstabs

Crosstabs - Age * Free F&V products Crosstabulation - August 24, 2020

Age * Free F&V products Crosstabulation

Count

		Free F&V products		Total
		no	yes	
Age	<30	139	45	184
	31-40	105	12	117
	41-50	43	10	53
	50>	40	7	47

Total	327	74	401

Crosstabs

Crosstabs - Age * Hygienic conditions Crosstabulation - August 24, 2020

Age * Hygienic conditions Crosstabulation

Count

		Hygienic conditions		
		no	yes	Total
Age	<30	157	27	184
	31-40	103	14	117
	41-50	47	6	53
	50>	39	8	47
Total		346	55	401

Crosstabs

Crosstabs - Sex * Free F&V products Crosstabulation - August 24, 2020

Sex * Free F&V products Crosstabulation

Count

		Free F&V products		
		no	yes	Total
Sex	Male	134	30	164
	Female	193	44	237
Total		327	74	401

Crosstabs

Crosstabs - Sex * Hygienic conditions Crosstabulation - August 24, 2020

Sex * Hygienic conditions Crosstabulation

Count

		Hygienic conditions		
		no	yes	Total
Sex	Male	148	16	164
	Female	198	39	237
Total		346	55	401

Crosstabs

Crosstabs - Organizational Position * Free F&V products Crosstabulation - August 24, 2020

Organizational Position * Free F&V products Crosstabulation

Count

		Free F&V products		
		no	yes	Total
Organizational Position	Administraive staff	97	19	116
	Manager	111	31	142
	Senior Manager	42	9	51
	Executive Manager	18	3	21
	Owner, Board Member or similar	9	2	11
	Other white-collar job	49	10	59
Total		326	74	400

Crosstabs

Crosstabs - Organizational Position * Hygienic conditions Crosstabulation - August 24, 2020

Organizational Position * Hygienic conditions Crosstabulation

Count

		Hygienic conditions		
		no	yes	Total
Organizational Position	Administraive staff	100	16	116
	Manager	118	24	142
	Senior Manager	47	4	51
	Executive Manager	18	3	21
	Owner, Board Member or similar	11	0	11
	Other white-collar job	51	8	59
Total		345	55	400

Crosstabs

Crosstabs - F&V Intake * Free F&V products Crosstabulation - August 24, 2020

F&V Intake * Free F&V products Crosstabulation

Count

		Free F&V products		
		no	yes	Total
F&V Intake	1,00	54	11	65
	1,50	76	26	102
	2,00	89	18	107
	2,50	59	12	71
	3,00	28	5	33
	3,50	9	0	9
	4,00	5	1	6
	4,50	1	1	2
Total		321	74	395

Crosstabs

Crosstabs - F&V Intake * Hygienic conditions Crosstabulation - August 24, 2020

F&V Intake * Hygienic conditions Crosstabulation

Count

		Hygienic conditions		
		no	yes	Total
F&V Intake	1,00	58	7	65
	1,50	88	14	102
	2,00	96	11	107
	2,50	57	14	71
	3,00	26	7	33
	3,50	9	0	9
	4,00	4	2	6
	4,50	2	0	2
Total		340	55	395